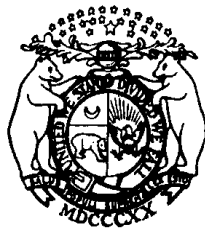


THE CARL D. PERKINS  
VOCATIONAL AND TECHNICAL  
EDUCATION  
ACT OF 1998  
PUBLIC LAW 105-332



Missouri  
STATE PLAN  
for Vocational Education

\*\*\*\*\*

State Fiscal Years 2000-2004

Missouri Department of Elementary and Secondary Education  
P.O. Box 480, 205 Jefferson Street  
Jefferson City, MO 65102-0480

January, 2001

#### Policy of Nondiscrimination

Applicants for admission and employment, students, parents of elementary and secondary students, employees, sources of referral of applicants for admissions and employment, and all unions or professional organizations holding collective bargaining or professional agreements are hereby notified that the Missouri Department of Elementary and Secondary Education does not discriminate on the basis of race, color, national origin, gender, age, or disabling condition in admission or access to, or treatment, or employment in its programs and activities.

Any person having inquiries concerning compliance with the regulations implementing Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973, is directed to contact:

Director of Human Resources  
Missouri Department of Elementary and Secondary Education  
P.O. Box 480  
Jefferson City, Missouri 65102-0480  
(573) 751-3815

This position has been designated to coordinate the Department's efforts to comply with the regulations implementing Title VI, Title IX, and Section 504.

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# MISSOURI STATE PLAN FOR VOCATIONAL EDUCATION

for implementation of the

## CARL D. PERKINS VOCATIONAL AND TECHNICAL EDUCATION ACT OF 1998

Public Law 105-332

### Missouri's Education System

The Missouri State Board of Education is the sole state agency responsible for the administration and supervision of vocational education programs authorized by the Carl D. Perkins Vocational and Technical Education Act of 1998, Public Law (P.L.) 105-332. The State Board has statutory authority to cooperate with the United States Department of Education in the administration of this five-year, State Plan for Vocational Education in Missouri and will not delegate its responsibilities under this law to any other state agency.

According to the Missouri Constitution, "The supervision of instruction in the public schools shall be vested in a state board of education..." (Article IX, Section 2(a); 1945). This provision gives the State Board of Education general authority for public education, within limits set by the General Assembly. The Board has the constitutional responsibility to establish policy, supervise instruction in the public schools and to adopt accreditation rules for the operation of Missouri schools (Section 161.092, Revised Statutes of Missouri (RSMo)). The Board's duties and responsibilities range from preschool through grade twelve (12), secondary vocational education, postsecondary vocational education, adult education, Veterans' education, and Vocational Rehabilitation.

By law, the Board serves as the state-level governing body for secondary vocational education programs provided by local school districts, as well as postsecondary vocational education programs offered by community colleges, a technical college, and public four-year institutions that are supported, in part, by the State Plan for Vocational Education. The State Board is responsible for the coordination and development of policy with respect to the vocational education programs under P.L. 105-332 and for the development of a State Plan.

The State Board of Education consists of eight (8) lay members appointed by the Governor, with the advice and consent of the Senate, after an open committee hearing. The term of office of each member is eight (8) years.

The State Board appoints the Commissioner of Education who serves as its administrative and chief executive officer, and as director of the Missouri Department of Elementary and Secondary Education. The Commissioner provides leadership to local school districts in all matters pertaining to the regulatory function of compliance with state and federal statutes or rules.

Both professional and support staff of the Department of Elementary and Secondary Education are appointed by the State Board on the recommendation of the Commissioner. The Commissioner, through the Department, provides assistance to elevate the standards and efficiency of the instruction given in the public schools of the state. The Department, with approval of the State Board of Education, sets accreditation standards for school districts; defines academic performance standards, curriculum frameworks and assessment standards for use by public schools; licenses teachers and other personnel in public schools; and approves professional education programs in the state's colleges and universities. The Commissioner and staff members are responsible for carrying out the policies of the State Board as they concern the state's program of vocational education.

Within the Department of Elementary and Secondary Education, the Division of Vocational and Adult Education has a major responsibility for secondary, postsecondary, and adult vocational education in Missouri. Program and services provided include assistance with program approval, effective practices, technical assistance, funding, and vocational student organizations. Program content specialists are available in the following areas: Agricultural Education; Business Education; Family and Consumer Sciences; Trade and Industrial Education; Marketing Education; Health Occupations Education, and Technology Education. Other multi-discipline issues addressed include applied academics, articulation agreement between schools, cooperative education, entrepreneurship education, gender equity, the Missouri Comprehensive Guidance Program Model, labor market information, program evaluation, regional planning, Missouri's Community Careers System, Tech Prep Education, and special populations.

Division of Vocational and Adult Education program content specialists serve as State Advisors for: a) secondary vocational student organizations, including DECA: An Association of Marketing Students, FFA, Family, Career and Community Leaders of America (previously FHA/HERO), Future Business Leaders of America, Technology Student Association, and SkillsUSA-VICA (previously Vocational Industrial Clubs of America); b) postsecondary vocational student organizations, such as Postsecondary Agriculture Students, Delta Epsilon Chi, Phi Beta Lambda, and SkillsUSA-VICA (previously Vocational Industrial Clubs of America); and c) adult vocational organizations which include Missouri Young Farmers Association and Missouri Young Farm Wives Association.

The development of the State Plan for the Carl D. Perkins Vocational and Technical Education Act of 1998 is the responsibility of the Division of Vocational and Adult Education.

The Division of Vocational and Adult Education is organized in three units: Vocational-Technical Education; Community and Career Education; and Adult Education and Employment Training. The Vocational-Technical Education unit has five (5) sections, with each linking a specified vocational education program with one or more of the career paths applicable for the State of Missouri.

The Community and Career Education unit is comprised of seven (7) sections charged with the provision of federal and state funded services and programs which support vocational education,

and create a bridge to other initiatives which offer enhanced opportunities for students participating in the State's vocational education system.

The Adult Education and Employment Training unit features six (6) sections which link vocational education with life-long learning experiences, employment specific training and education opportunities, and other programs associated with the Workforce Investment Act of 1998.

The Missouri Vocational Education Delivery System provides programs, services and activities to serve individuals who:

- A. are in secondary schools;
- B. are in postsecondary vocational education programs;
- C. are adults in need of training or retraining;
- D. have disadvantaged and/or disabling conditions; and
- E. are members of other special populations.

While the Division of Vocational and Adult Education is specifically charged with the responsibilities of carrying out programs, services and activities relating to the State Plan, it should be noted that the Division functions as an integral part of the Department. The Department is concerned with the fundamental rights of each individual to have equal access to educational opportunities. All persons receiving benefits from the Missouri educational system should have the opportunity to develop intellectually, physically, socioeconomically and vocationally commensurate with their developmental ability.

All students, including the disabled and disadvantaged, are actively recruited and provided equal access to the vocational education programs, services and activities offered by eligible recipients. For several years, the Vocational-Technical Education unit has assumed the responsibility of carrying out the activities specified in the Office for Civil Rights Methods of Administration (MOU) that includes conducting compliance reviews of local education agencies. This process is designed to ensure equal access for disadvantaged, disabled, female and minority populations. In addition, staff members of the Vocational-Technical Education unit participate in the Missouri School Improvement Program which regularly (on a five-year cycle) evaluates and accredits all public elementary and secondary school districts within the State.

In carrying out its responsibilities for the administration of the statewide vocational education delivery system, the State Board of Education, through its employees, has cooperative arrangements with other agencies of state government. The Division of Vocational and Adult Education cooperates in planning, maintaining and appraising vocational programs with the Department of Higher Education, the Department of Economic Development, the Department of Social Services, the Department of Labor and Industrial Relations, the Department of

Corrections, and various other agencies. Department of Elementary and Secondary Education supervisory personnel assist in curriculum development, testing and assessment, instructional procedures, monitoring and program evaluation. Department of Elementary and Secondary Education staff work cooperatively with the Department's of Economic Development and Labor and Industrial Relations in securing labor market information, in obtaining rates of unemployment throughout the state, and in coordinating local efforts to provide assistance to vocational graduates who wish to be placed in the labor market.

The Missouri vocational education system provides statewide local delivery of services through 12 community college service regions (which in some cases may include multiple community college campuses), 57 area vocational schools, one (1) state technical college, seven (7) four-year universities offering two-year associate degree programs, and 452 comprehensive high schools.

The vocational education delivery system is Missouri's primary educational system for preparing the state's workforce. Vocational and technical education programs provide individuals with the technical knowledge and skills needed to prepare for employment in current and emerging fields, to continue their education, or to be retrained for new business and industry practices. The scope of Missouri's vocational education delivery system ranges from career awareness and prevocational skill development at the junior and middle school level, occupational skill development at the secondary and postsecondary level and Customized Training for Missouri's business and industry.

#### TEN YEAR HISTORY OF THE ENROLLMENT AND EXPENDITURES OF VOCATIONAL EDUCATION IN MISSOURI

ENROLLMENT				YEAR	EXPENDITURES			
SECONDARY	POST SECONDARY	ADULT	TOTAL		STATE FUNDS	FEDERAL FUNDS	*LOCAL FUNDS	TOTAL
117,752	44,406	101,186	263,344	1987-88	\$31,966,778	\$17,821,051	**\$62,762,924	\$112,550,753
119,397	47,659	98,973	266,069	1988-89	\$34,350,928	\$17,734,624	**\$68,009,696	\$120,095,248
110,317	62,373	112,035	284,725	1989-90	\$36,277,404	\$18,664,492	**\$68,686,750	\$123,628,646
107,888	60,991	124,273	293,152	1990-91	\$35,926,528	\$18,212,157	**\$73,977,006	\$128,115,691
117,937	68,080	116,994	303,011	1991-92	\$35,266,895	\$19,717,510	**\$71,671,906	\$126,656,311
116,472	66,816	103,139	286,427	1992-93	\$35,352,528	\$22,039,567	**\$71,604,384	\$128,996,479
116,904	62,444	93,190	272,538	1993-94	\$38,443,844	\$22,346,866	**\$78,124,109	\$138,914,819
120,874	57,885	101,914	280,673	1994-95	45,074,084	20,933,342	**\$84,449,547	\$150,456,973
124,849	55,855	98,077	278,781	1995-96	50,457,054	21,460,226	90,750,734	\$162,668,014
127,598	54,132	94,695	276,425	1996-97	48,434,167	21,662,232	101,618,288	\$171,714,687
124,395	49,637	102,082	276,114	1997-98	55,186,416	21,452,368	133,224,409	209,863,193

\* Reported Expenditures  
 \*\* Does Not Include Expenditures for Family & Consumer Sciences Education and Guidance

## FISCAL YEAR 1998 STATISTICS FOR VOCATIONAL EDUCATION IN MISSOURI

- During Fiscal Year 1998, over 52% of the high school students (9-12th grade) within the state participated in vocational education programs, services, and activities.
- More than 28,800 high school students from more than 520 school districts received occupational skill training at area vocational schools in Fiscal Year 1998. The area vocational schools also enrolled more than 51,615 tuition paying adults in training or retraining programs.
- Annually, approximately 56,900 individuals in Missouri take part in leadership development activities through vocational student organizations (DECA/MMA-DEX, FBLA/PBL, FFA/PAS/YF-YFW, FHA/HERO, and VICA) related to their career interests.
- The 12 community college districts and 7 four-year colleges and universities within Missouri's vocational education delivery system provided training leading to associate degrees for over 49,000 individuals during Fiscal Year 1998.
- Missouri's Industry Training Program provided services to 230 Missouri firms by training more than 31,244 persons in Customized Training programs during Fiscal Year 1998.
- Seven (7) regional centers provided supplemental services to the existing supportive services for single parent/ displaced homemaker and nontraditional male/female students throughout the delivery system. During Fiscal Year 1998, 10,477 (6,015 single parent/displaced homemakers and 4,462 nontraditional male/female) students received these services.
- Throughout the network of area vocational schools, 42 centers have been established to provide supportive services for secondary students who have been identified as being at-risk. These centers are jointly funded through the Job Training Partnership Act and the Carl D. Perkins Vocational and Applied Technology Education Act. These centers combine academic and vocational instruction, and provide intensive counseling services. During Fiscal Year 1998, the 42 jointly funded centers served more than 4,700 at-risk students.
- Through business/industry partnerships, over 31,000 employers and employees serve on vocational education advisory committees each year. These committees provide valuable input concerning the relevancy of vocational curricula, equipment, and local job opportunities.
- As reported in Fiscal Year 1998 follow-up of 1997 graduates, 90% of the individuals available for employment following completion of a vocational education program were placed on the job. Thirty-two percent (32%) of the individuals completing vocational education training continued their education, and 3% enlisted in the armed services.



Office of Vocational and Adult Education  
The Carl D. Perkins Vocational and Technical Education Act of 1998  
Enacted October 31, 1998  
(Public Law 105-332)

The Missouri State Board of Education and the Department of Elementary and Secondary Education of the State of Missouri, hereby submits its Five-Year State Plan for Vocational Education to be effective until June 30, 2004. The eligible agency also assures that this plan, which serves as an agreement between State and Federal Governments under the Carl D. Perkins Vocational and Technical Education Act of 1998, will be administered in accordance with applicable Federal laws and regulations, including the following certifications and assurances:

CERTIFICATIONS

EDUCATION DEPARTMENT GENERAL  
ADMINISTRATIVE REGULATIONS  
(34 CFR PART 76.104)

1. That the plan is submitted by the State agency that is eligible to submit the plan. (34 CFR 76.104(a)(1)) *Missouri Constitution, Article IX; Section 161.092, RSMo-Powers and duties of the State Board of Education.*
2. That the State agency has authority under State law to perform the functions of the State under the program. (34 CFR 76.104(a)(2)) *Section 161.092 (2) (3), RSMo; Section 178.440, RSMo.*
3. That the State legally may carry out each provision of the plan. (34 CFR 76.104(a)(3)) *Section 178.440, RSMo.*
4. That all provisions of the plan are consistent with State law. (34 CFR 76.104(a)(4))
5. That a State officer, specified by title in the certification, has authority under State law to receive, hold, and disburse Federal funds made available under the plan. (34 CFR 76.104(a)(5)) *Section 161.092 (3), RSMo; Section 178.470, RSMo; and Section 178.540, RSMo.*
6. That the State officer who submits the plan, specified by title in the certification, has authority to submit the plan. (34 CFR 76.104(a)(6)) *Section 161.020 (1), RSMo; Section 178.440, RSMo; Section 178.430, RSMo (Acceptance of federal acts and funds); Section 161.112, RSMo; Section 161.122, RSMo; Section 178.540, RSMo.*
7. That the agency that submits the plan has adopted or otherwise formally approved the plan. (34 CFR 76.104(a)(7))

8. That the plan is the basis for State operation and administration of the program. (34 CFR 76.104(a)(8))
9. That a copy of the State Plan was submitted into the State Intergovernmental Review Process. (Executive Order 12372)

## ASSURANCES

The Carl D. Perkins Vocational and Technical Education Act of 1998  
Enacted October 31, 1998  
(Public Law 105-332)

In carrying out the administrative responsibilities identified in the Act, the Missouri State Board of Education and the Missouri Department of Elementary and Secondary Education give the following assurances:

1. The Department will comply with the applicable requirements of Title I, Vocational and Technical Education Assistance to the States; Title II, Tech Prep Education; and Title III, General Provisions (Carl D. Perkins Vocational and Technical Education Act of 1998).
2. The Department will allocate funds provided under Title I, Vocational and Technical Education Assistance to the States of the Act in which eighty-five percent (85%) of these funds will be made available for distribution to eligible recipients; and no more than ten percent (10%) of the eighty-five percent (85%) may be used for special targeting outside the formula. (Section 112(a))
3. The Department will match, from non-federal sources and on a dollar-for-dollar basis the funds allotted it. (Section 112(b))
4. The Department will emphasize student attainment of challenging State established academic, and vocational and technical, skill proficiencies; student attainment of a secondary school diploma or its recognized equivalent, a proficiency credential in conjunction with a secondary school diploma, or a postsecondary degree or credential; placement in, retention in, and completion of, postsecondary education or advanced training, placement in military service, or placement or retention in employment; student participation in and completion of vocational and technical education programs that lead to nontraditional training and employment. (Section 113(2)(A))
5. The Department will use federal funds made available under Title III of the Act to supplement, and to the extent practicable, increase the amount of state and local funds that would in the absence of such federal funds be made available for the uses specified in the State Plan and the local application of eligible recipients, and in no case supplant state or local funds. (Section 311(a))
6. The Department will adhere to the maintenance of fiscal effort provision by not decreasing its support for vocational education from one year to the next. (Section 311(b)(1)(A))
7. The Department will distribute all of the funds allocated for the secondary school vocational education programs and the postsecondary and adult vocational education programs to eligible recipients. (Section 132)

8. The Department will not use the funds to require any secondary school student to choose or pursue a specific career path or major; or mandate that any individual participate in a vocational and technical education program, including a vocational-technical education program that requires the attainment of a federally funded skill level, standard, or certificate of mastery. (Section 314)
9. The Department will not use any of the funds available under the Act to provide vocational education to students prior to the seventh grade, except to allow that equipment and facilities purchased with funds under this Act may be used by such students when not being utilized for approved vocational education programs. (Section 315)
10. The Department will not use the funds expended under Title I of P.L. 105-332 to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the purchasing entity, the employees of the purchasing entity, or any affiliate of such an organization. (Section 122(c)(11))
11. The Department will require the eligible recipient at the local level to provide a vocational and technical education program that is of the size, scope, and quality necessary to bring about improvement in the quality of vocational and technical education programs. (Section 134(c)(5))
12. The Department will ensure that none of the funds will be used to induce employers to relocate a business from one state to another if such relocation will result in a reduction in the number of jobs available in the state where the business enterprise is located. (Section 322)
13. The Department will ensure that the funds made available under the Act may be used to pay for the cost of vocational and technical education services required in an individualized education plan pursuant to the Individuals with Disabilities Education Act, and services necessary to meet the requirements of Section 504 of the Rehabilitation Act of 1973. (Section 325)
14. The Department will be responsible for obtaining audits in accordance with the Single Audit Act Amendments of 1996 and revised OMB Circular A-133, "Audits of States, Local Governments, and Non-Profit Organization." The audits shall be made by an independent auditor in accordance with generally accepted government auditing standards covering financial audits. (OMB Circular A-87: 80.26(a))

15. The Department will ensure, as OMB Circular A-133 requires, that no federal funds be used to pay for the cost of audits where the organization expends under \$300,000 a year in federal funds. The Department will be responsible for the financial monitoring of those eligible recipients expending under \$300,000 per year. Those recipients having expenditures greater than \$300,000 in federal funds will be required to have a Single Audit performed, while all other recipients will need to have a Yellow Book audit performed. (OMB Circular A-133)
16. The Department will comply with the requirement of this Act and the provisions of the State Plan, including the provision of a financial audit of funds received under Title I of P.L. 105-332 which may be included as part of an audit of other Federal or State programs. (Section 122(C)(10))
17. The Department will ensure that all eligible recipients of funds certify to the best of its knowledge and belief, that it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency. (OMB Circular A-87: 80.35))
18. The Department will ensure the privacy protections afforded parents and students under section 444 of the General Education Provisions Act (GEPA 20 U.S.C. 1232g), as added by the Family Educational Rights and Privacy Act of 1974 (section 513 of Public Law 93-380;88 Stat. 571). (Section 5. Privacy)
19. The Department will ensure that no funds under Perkins III will be used to provide funding under the School-To-Work Opportunities Act of 1994 or to carry out, through programs funded under this Act, activities that were funded under the School-To-Work Opportunities Act of 1994. (Section 6. Limitation)
20. The Department will ensure equal access to education and promote educational excellence by ensuring equal opportunities to participate for all eligible students, teachers, and other program beneficiaries in any project or activity carried out under this program and by promoting the ability of such students, teachers, and beneficiaries to meet high standards. (Section 427, GEPA)
21. The Department will ensure equitable access to, and equitable participation in the project or activity provided by the use of these funds by addressing the special needs of students, teachers, and other program beneficiaries in order to overcome barriers to equitable participation, including barriers based on gender, race, color, national origin, disability, and age. (Section 427, GEPA)
22. The Department will ensure that any service, product, report or other information generated by a computer for a period of time that goes beyond December 31, 1999, provided by the contractor/grantee to the Government will be “year 2000 compliant.” The definition of “year 2000 compliant” means information technology that accurately processes date/time data (including, but not limited to, calculating, comparing and sequencing) from, into and

between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations. Furthermore, “year 2000 compliant” information technology when used in combination with other information technology shall accurately process date/time data if the other information technology properly exchanges date/time with it.

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(State Agency)

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(Address)

By:

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(Signature of Agency Head)

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(Date)

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(Title)

## I. PLANNING, COORDINATION AND COLLABORATION PRIOR TO PLAN SUBMISSION

### A. Requirements

1. The eligible agency shall conduct public hearings in the State, after appropriate and sufficient notice, for the purpose of affording all segments of the public and interested organizations and groups (including employers, labor organizations, and parents), an opportunity to present their views and make recommendations regarding the State Plan. (Section 122(a)(3))

Two-hour public hearings were held at six sites (St. Louis, Springfield, Kansas City, Cape Girardeau, Macon, and Columbia) to obtain comments on the Missouri State Plan for implementation of the Carl D. Perkins Vocational and Technical Education Act of 1998. The hearing dates and locations were placed on the Division of Vocational and Adult Education's Web Page and a news release was mailed to over 2,000 individuals including the following: local school administrators, Tech Prep coordinators, equity coordinators, guidance counselors, school-to-career coordinators, employers, business/industry representatives, students, teachers, parents, teacher educators, State Workforce Investment Board members, and vocational associations. The news release was also sent to over 600 news media services (wire, newspapers, television, radio). Notice of the public hearings was provided 30 days prior to the hearing dates. Copies of the notices of public hearings, what media were used to publicize the hearings, the mailing lists used for notification of public hearings, the listing of locations of public hearings that were held, a listing of those individuals in attendance at the public hearings, and the recommendations and comments made by the attendees will be maintained in the official State Plan files in the Division of Vocational and Adult Education, Missouri Department of Elementary and Secondary Education.

Nearly 200 participants attended the public hearings and were provided the opportunity to make comments orally and in writing. Comment sheets were provided at each of the sites. Draft copies of the plan were made available at the hearing sites and were mailed in advance to area vocational school directors and postsecondary occupational deans.

2. A summary of {the above} recommendations and the eligible agency's response to such recommendations shall be included in the State Plan. (Section 122(a)(3))

Before public comments were received at the public hearings, Department staff presented a brief PowerPoint presentation covering major provisions of the draft State Plan. All aspects of the State Plan, including the reservation of funds under Section 112(c) of the Act, and the amount and uses of funds reserved for services that prepare individuals for nontraditional training and employment under Section 112 (a)(2)(B) of the Act, were specifically cited in the PowerPoint presentation.

3. The eligible agency shall develop the State Plan in consultation with teachers, eligible recipients, parents, students, interested community members, representatives of special populations, representatives of business and industry, and representatives of labor organizations in the State, and shall consult the Governor of the State with respect to such development. (Section 122(b) (1))

Representatives from the following groups were involved in the plan development:

- Governor's Office
- Missouri Training and Employment Council  
(Missouri's designated State Workforce Development Board)
- Membership to include representatives from:
  - Business and Industry
  - Labor Organizations
  - Department of Economic Development
  - Department of Social Services (Family Services)
  - Department of Higher Education
  - Department of Labor and Industrial Relations
  - Community Based Organizations
- Local school administrators
- Tech Prep coordinators
- Equity coordinators
- Guidance counselors
- School-to-Career coordinators
- Vocational administrators (secondary and postsecondary)
- Community college and university officials
- Employers
- Business/industry representatives
- Students
- Teachers
- Parents
- Vocational Education associations

The Governor's Office was provided a draft of the State Plan and Department staff reviewed the State Plan contents with members of the Governor's staff. A letter of support will be forwarded upon receipt.

A state assessment of vocational education survey instrument was mailed to over 2,000 individuals including the following: local school administrators, Tech Prep coordinators, equity coordinators, guidance counselors, school-to-career coordinators, employers, business/industry representatives, students, teachers, parents, teacher educators, state workforce investment board members, and vocational associations. The survey focused on measuring the effectiveness of a variety of attributes pertinent to the primary and secondary consumers of vocational education.



Approximately 75 parents received the statewide assessment of vocational education survey instrument, and had the opportunity to provide the Department of Elementary and Secondary Education with feedback concerning Missouri’s Vocational Education System. The parents were identified as those who had students participating in vocational education programs and various Vocational Student Organizations (VSOs). The same parents received the notification of public hearings which were held across the State. A total of 12 respondents to the statewide assessment survey specifically indicated that the “parent role” most closely reflected their role in vocational education. An additional 113 respondents listed the “parent role” in conjunction with additional categories. Since the survey instrument did not request a listing of multiple roles, it is assumed that numerous other respondents were also parents with children in educational settings.

Particular attention was directed to reporting the differing percentages of responses by such subgroups participating in the survey to include parents, students, and employers.

The following matrix provides clarification as to how results of the needs assessment were actually incorporated into the State Plan. The matrix is broken out by key areas and issues that did not receive a high positive response on the needs assessment from such groups as parents, teachers, and employers and therefore reflected the need for strategies to address those concerns. By each key area and issue, strategies that were included in the State Plan are highlighted as well as the evaluation process that will take place, if applicable.

EXAMPLES OF HOW NEEDS ASSESSMENT FINDINGS FROM PARENTS, STUDENTS AND EMPLOYERS WERE  
INCORPORATED IN THE MISSOURI STATE PLANS FOR VOCATIONAL EDUCATION FOR  
STATE FISCAL YEAR 2000-2004

KEY AREA	ISSUE	TARGETED AUDIENCES	STRATEGIES	EVALUATION
Curriculum & Instruction	Provide training for high-skill, high-wage careers.	Students, employers, parents and teachers indicated concern with the relevance of instruction in emerging technologies and preparation for high-skill, high-wage careers (33%-79%).	Provide state vocational education enhancement grant funds to offer new programs and improve existing programs (curriculum, equipment, facility improvement, etc.).	End-of-the-year reports for state vocational education enhancement grants.
Curriculum & Instruction	Provide training for high-skill, high-wage careers.	Employers reported they were not knowledgeable of teachers' professional development plans (61%).	Provide appropriately certificated teachers externship opportunities as a part of their professional development plan.	Analysis of end-of-the-year reports from local education agencies.
Curriculum & Instruction	Provide training for high-skill, high-wage careers.	Teachers, administrators, employers, and parents indicated concern with relevance of	Align programs to high skill, high wage jobs in current and emerging occupations.	Annual review of high demand, high skill, high wage occupations, LMI records and curriculum

KEY AREA	ISSUE	TARGETED AUDIENCES	STRATEGIES	EVALUATION
		instruction in emerging technologies (33%-79%).		requests from local education agencies.
Curriculum & Instruction	Provide training for high-skill, high-wage careers.	Students, employers, parents and teachers indicated concern with the relevance of instruction in emerging technologies and preparation for high-skill, high-wage careers (33%-79%).	Offer Advantage Missouri loans to encourage students attending approved postsecondary institutions to pursue training to become employed in high demand occupations.	Analysis of enrollment in higher education programs in high demand occupations.
Curriculum & Instruction	Incorporate challenging academic skills in vocational education curriculum.	Non-vocational teachers were less likely to agree that the same challenging academic skills were being taught to vocational education students. Parents and employers reported a	Crosswalk vocational competencies with Missouri Show-Me Standards to identify academic knowledge and performance standards supported by vocational education.	Administer the Missouri Assessment Program to measure student progress toward meeting the Show-Me Standards.

KEY AREA	ISSUE	TARGETED AUDIENCES	STRATEGIES	EVALUATION
		high degree of “don’t know” responses (33%-53%).	Students participating in vocational education programs must meet all general academic standards required of all secondary students.	Graduation rate of students participating in vocational programs.
Equipment	Provide state-of-the-art equipment and facilities to educate students for high-skill, high-wage jobs.	Students, employers and parents disagree that equipment in vocational programs were state of the art.	Provide vocational enhancement grant funds (75/25% matching funds) to ensure that state-of-the-art equipment and facilities are available to support the curriculum.	Placement in high-skill, high-wage jobs or postsecondary education and review of end of the year report of state vocational enhancement grants.
Measurement and Evaluation	Effectively utilize occupational competency lists to direct instructional experiences.	Students, parents, and employers were less likely to agree on the effective use of occupational competencies (56%-77%).	Research current strategies and disseminate best practices so that an effective instructional management system will be available to all vocational programs.	Results of the Missouri School Improvement Program Review.
Measurement and	Involve stakeholders	Parents, employers	Develop a model	Results of the

KEY AREA	ISSUE	TARGETED AUDIENCES	STRATEGIES	EVALUATION
Evaluation	(parents, employers, students, business/industry, etc.) in the annual program evaluation.	and students were less informed than other groups on program evaluation.	program evaluation plan which establishes participation of the following groups: business/labor, parents, students.	Missouri School Improvement Program Review.

The following table of identified businesses and industries are those that had an opportunity to provide feedback on Missouri's Vocational Education System through the statewide assessment of vocational education survey instrument. The same businesses received the notification of public hearings which were held across the state. These businesses represented a good cross-section of small, medium, and large enterprises as well as being representative from rural, suburban, and metropolitan areas. Approximately 50 business representatives responded to the assessment survey. In addition, several of the identified businesses and industries had representatives at the public hearings, either as direct business representatives or educator representatives doing Customized Training with those businesses and industries. Examples would include, Shawnee Manufacturing, Dierberg's Markets, General Motors, The Boeing Company, Chrysler, and Harmon Industries.

*Missouri Business and Industries Which Participated in the Statewide Assessment of  
Vocational Education and Development of the  
State Plan for Vocational Education  
January - April, 1999*

Name of Business and Industry	Location
3-M Corporation	Springfield
ABLE Body Corporation	Joplin
ACE Manufacturing and Parts Company	Sullivan
Applied Food Biotechnology, Incorporated	St. Charles
Associated General Contractors, Incorporated	Springfield
Boeing	St. Louis
Brass Eagle	Neosho
Briggs & Stratton	Rolla
Central Bank	Jefferson City
Chrysler Corporation	Fenton
Con-Agra Frozen Foods, Incorporated	Milan and Macon
Detroit Tool and Engineering	Lebanon
Dierberg's Markets	Chesterfield
Emerson Electric Company	Kennett
Engineered Polymers Company	Kansas City
Famous-Barr Warehouse	St. Louis
General Electric Company	Springfield
General Motors	Wentzville
Harmon Industries	Warrensburg
Lee Apparel Company	Lebanon
McDonald's	Pacific and Columbia
Missouri Chamber of Commerce	Jefferson City
Missouri Retailer's Association	Jefferson City
Nabisco Foods Group	St. Louis
Nevada City Hospital	Nevada
Norandex	Joplin
Pillsbury Company	Joplin
Plastic Enterprises Incorporated	Lee's Summit
Shawnee Manufacturing	Eminence
Sprint/United Telephone	Jefferson City and Kansas City
Tyson Foods, Incorporated	Noel and Sedalia
Webb Industries	Webb City
World Com Incorporated	Chesterfield

4. The eligible agency shall develop effective activities and procedures, including access to information needed to use such procedures, to allow the individuals listed in (Section 122(b)(1)) to participate in State and local decisions that relate to the development of the State plan. (Section 122(b)(2))

In order to assure that those interested in giving input to the development of the State Plan had knowledge of the plan process, state staff presented information on the plan development process and timelines, a description of work team assignments, and a summary of the major provisions of the Act to local vocational administrators, teachers and Missouri Vocational Association board members. A draft of the State Plan was placed on the Department's Web Page.

A group of local vocational administrators were invited to a meeting to react to the accountability section of the plan. Their comments and suggestions were included in the final draft.

Regional Tech Prep coordinators met several times to assist in the development of the five-year State Plan for Tech Prep.

In addition, input in the development of and support for the State Plan was sought from the Missouri Training and Employment Council (MTEC), which is soon to be designated as the State's Workforce Investment Board. Business, industry, and labor representatives serving on the Council are from the Builders Association Training Center (Kansas City, Missouri), Missouri Hospital Association, Pipefitters Local 562 (St. Louis, Missouri), the Missouri State Labor Council, Jackson Hardware (Warrensburg, Missouri), The Boeing Company, Briggs and Stratton, Wire Rope Corporation of America, Spartan Light Metal Products (Mexico, Missouri), and Robert E. Bell Associates, Inc. (St. Louis, Missouri).

On April 5, 1999, a presentation of the State Plan was made to the executive committee of the Missouri Training and Employment Council (MTEC). The Assistant Commissioner of Vocational and Adult Education is a member of this executive committee as well as the full council.

The framework used for seeking consultation and writing of the State Plan for Vocational Education for Fiscal Years 2000-2004, Departmental teams assigned to research and write portions of the State Plan, lists of dates when consultations were made, work products issued from various meetings, etc., will be maintained in the official State Plan files in the Division of Vocational and Adult Education, Missouri Department of Elementary and Secondary Education.

5. The eligible agency shall develop the portion of the plan relating to the amount and uses of any funds proposed to be reserved for adult vocational and technical education, postsecondary vocational and technical education, tech prep education and



secondary and vocational and technical education after consultation with the State agency responsible for supervision of community colleges, technical institutes, or other 2-year postsecondary institutions primarily engaged providing postsecondary vocational and technical education, and the State agency responsible for secondary education. If a State agency finds that a portion of the final State plan is objectionable, the State agency shall file its objections with the eligible agency. The eligible agency shall respond to any objections of the State agency in the State Plan submitted to the Secretary. (Section 122(e)(3))

Missouri has a single State Board of Education who is responsible for all public education, academic and vocational, K-12. The Board serves as the state-level governing body for vocational education programs provided by local school districts, community/technical colleges and four year institutions. The State Board of Education delegates authority to the Division of Vocational and Adult Education for all vocational education in the state including secondary, postsecondary, and adult. The Division administers state and federal funds for secondary, postsecondary, and adult vocational education in the state.

## II. PROGRAM ADMINISTRATION

### A. Description

1. Each eligible agency shall prepare and submit to the Secretary a State plan for a 5-year period, together with such annual revisions as the eligible agency determines to be necessary. (Section 122(a)(1)). The eligible agency shall provide a copy of the state's governance structure for vocational and technical education.

The Missouri State Board of Education is the designated state board to plan, develop and implement the five-year plan for vocational education as required by the Carl D. Perkins Vocational and Technical Education Act of 1998. The State Board appoints the Commissioner of Education who serves as its administrative and chief executive officer and as the director of the Missouri Department of Elementary and Secondary Education. The Department is primarily a service agency that works with local education officials. Through its regulatory functions, the Department strives to assure the effective and efficient operation of state and federal programs.

The State Board of Education and the Department of Elementary and Secondary Education hereby submit the Missouri State Plan for Vocational Education under provisions of P.L. 105-332, the Carl D. Perkins Vocational and Technical Education Act of 1998. This five-year state plan covers the period of State Fiscal Year 2000 (July 1, 1999 - June 30, 2000) through State Fiscal Year 2004 (July 1, 2003 - June 30, 2004). The State Board will annually review Missouri's implementation of the State Plan as a result of annual performance reports submitted by local recipients. If necessary, revisions will be made to the State Plan as agreed to by the State Board and the U.S. Department of Education. In addition, the State Plan will be reviewed in conjunction with the submission of the state's Workforce Investment Act State Plan being submitted by July, 2000.

At the end of 2001, a complete review of the State Plan will be conducted. If necessary, the State Plan will be revised upon agreement with the U.S. Department of Education to better assist the state in meeting or exceeding the state adjusted levels of performance as per Section 122(a)(1) of the Act.

2. Describe the vocational and technical education activities to be assisted that are designed to meet or exceed the state-adjusted levels of performance. (Section 122(c)(1))

Missouri has a very comprehensive menu of vocational and technical education activities. Funding for these activities is made possible through a combination of local, state and/or federal funds. Such funding will assist the schools and the state in meeting or exceeding the state-adjusted levels of performance. These activities are categorized as follows:

a. Base Financial Support for Vocational-Technical Education

- (1) The Effectiveness Index and Incentive Funding Formula consists of two components. The first component gives an indication of the relative success of placing students in jobs. The second component assigns values according to responsiveness of a particular program to labor market supply and demand factors. Values for each of these components are added together to obtain an Effectiveness Index (EI) score for each area vocational school or comprehensive high school and funds are distributed accordingly.

During the first two years of the State Plan implementation, performance data will be evaluated. Consideration will be given to additional financial incentives to schools who meet or exceed the state-adjusted levels of performance.

- (2) Regular instruction programs utilize state funds to maintain existing Department-approved vocational-technical education programs. State funds may also be used to establish Department-approved new and/or expanding vocational-technical education programs.
- (3) Area vocational schools receive reimbursement for properly certificated secondary teachers in State Board-designated area vocational schools. The amount of reimbursement is determined annually by utilizing the Effectiveness Index and Incentive Funding Formula together with a base funding amount.
- (4) Postsecondary institutions receive reimbursement for each Department-approved postsecondary vocational education instructor.
- (5) Adult programs receive a percentage of the salary expenditure for Department-approved noncredit adult programs or projects.
- (6) Local education agencies (LEAs) that send secondary students to another LEA operating an area vocational school are eligible for contracted services reimbursement which is established annually. To qualify, a student must be enrolled for at least four and one-half (4 ½) weeks in a semester and the “sending” LEA must pay the cost to the vocational school.

b. Support Services

Several support services offered in Missouri will assist with the “base financial support for vocational-technical education.” The base financial support includes both federal Perkins III dollars as well as state and local vocational-technical education funds.

- (1) Learning Centers have been established in 43 area vocational schools to address the problem of students who are at-risk of dropping out of school. Over 4,000 students in grades 7-12 have received assistance in career counseling, career assessment, basic skills instruction, workplace readiness and other services to reduce barriers to success. Students are encouraged to follow their interests and enroll in vocational programming, if appropriate.
- (2) Alternative education programs focus on students not able to complete requirements for graduation in the regular school setting. Services for these individuals who have been placed in established alternative education settings or who need to complete their education include Adult Basic Education, GED preparation, summer and night school, correspondence programs, employment readiness, tutoring, counseling, and assessments of interests and abilities.

Approximately 50 at-risk sites, located in area vocational schools, exist in the State of Missouri to provide alternative instruction for eligible students. The overall success rate of students in these centers has ranged from 82% to 88% from Program Years 1991 through 1997. Success is defined as the student no longer in need of these special services, continuing in the program, graduating from a "home" high school, enrolling in Adult Basic Education (ABE) classes, or earning a GED. These success rates are impressive, since the students in these programs are highly at risk of dropping out of school and are not a sample of the general school population.

No federal vocational dollars are currently being used, and no Perkins III federal vocational dollars will be used for specific programs designed as Adult Basic Education or GED test preparation. ABE services and GED test preparation services are provided in Missouri through the federal Adult Education Act funds, soon to be the Adult Education and Family Literacy Act (Title II of the Workforce Investment Act), and state adult education and literacy funds.

- (3) New Traditions Regional Resource Centers in eight (8) locations throughout the state and resource personnel in area schools and community colleges will be available to assist local recipients with the increased emphasis on accountability for special populations. Personnel will provide workshops and information for faculty, administrators, and students on career exploration and decision-making, career assessment, career counseling, job-seeking skills and preparation, vocational planning, nontraditional training and employment, student success and retention, and harassment issues. Personnel will work with individual students to assess needs and seek out support services.
- (4) Using federal Perkins III funds, Project ENTER focuses on building awareness and enhancing the image of nontraditional opportunities in education and employment. Major activities include a statewide contest

highlighting secondary and postsecondary students who have chosen nontraditional careers and programs and, an “Expanding Your Horizons in Math and Science” workshop for 7<sup>th</sup> and 8<sup>th</sup> grade young women. The project also creates and distributes posters, brochures, and activity packets to schools, teachers, and students.

- (5) Using federal Perkins III funds, Project SERVE provides equity resources to all vocational educators through its extensive free-loan library of print and video materials. Professional development opportunities are provided through local, regional, and statewide workshops and conferences. The project distributes a quarterly newsletter and is responsible for implementing a data collection system. Brochures and pamphlets focusing on programs for special populations are also available for local agencies.
- (6) Services such as job readiness skills, job search skills, career counseling and career exploration are provided to incarcerated individuals who are completing their sentences and preparing for release. These services are made possible through annual grant awards issued by the Department.
- (7) Vocational Resource Educator (VRE) is an ancillary position with the role and responsibilities to assist students with disabilities in appropriate vocational education program placement, provide appropriate vocational opportunities with reasonable vocational education objectives, provide such resource assistance to vocational teachers, and assist in the placement of students into gainful employment after training.
- (8) With Missouri’s growing population of students with limited English skills, the state will make a concentrated effort to assist students with entry into appropriate vocational and technical education programs. These efforts will include recruitment information aimed at both students and their parents; materials printed in alternative languages when necessary; tutors to help with basic skills; inservice on students’ special needs for faculty and administrators; establishing support groups; career counseling, and providing the appropriate support services of childcare, tuition, transportation, and supplies.
- (9) Guidance in Missouri is a mainstream program that provides a structure to schools to assist them in implementing comprehensive, sequential developmental activities for all students to attain competencies. Two programs/systems have been endorsed to accomplish this mission—The *Missouri Comprehensive Guidance: A Model for Program Development, Implementation, and Evaluation* (Missouri Comprehensive Guidance Program Model) and the *Guidance and Placement System in Area Vocational Schools*. The Missouri Comprehensive Guidance Program Model addresses the elementary, middle school, and comprehensive high school levels, enabling

students to develop informed educational and career plans. It includes extensive career awareness activities beginning at the elementary level, ongoing career exploration and planning activities that provide the basis for making informed career choices, including awareness, identification, and selection of appropriate career paths; increased knowledge of self and others; a greater knowledge of our changing world; decision-making skills; and the enhancement of life-coping skills to help students succeed in the labor market and the world of the future. In the process and as a result of extensive career awareness, exploration, and planning in the early school years, students may choose a career path or paths, on a voluntary basis, appropriate to their needs, interests, and abilities by the time they reach the comprehensive high school level. On the basis of and depending on their career path choices, enrollment in an area vocational school may be appropriate.

There are 57 area vocational schools in Missouri, with over 90% of the comprehensive high schools sending students to these sites. Counselors and personnel in these area vocational schools work closely with their counterparts in the sending schools in the recruitment, guidance, and placement of the students. The *Guidance and Placement System in Area Vocational Schools* is being established at these area vocational schools. It is based on practitioner-developed Standards and Descriptors, and its overall purpose is to help students become gainfully and productively employed in an appropriate career field by assisting them in choosing appropriate vocational programs, providing all students with job-seeking and job-retention skills, providing necessary guidance services during the vocational education process, and assisting them with placement into a job, continuing education, or the military services. Together, the *Missouri Comprehensive Guidance Model for Program Development, Implementation, and Evaluation* and the *Missouri Guidance and Placement System in Area Vocational Schools* are fulfilling the mission of guidance in Missouri by providing a seamless progression, blending academic and vocational skills, and exemplifying effectiveness yet diversity in program development and delivery.

c. Other State Initiatives

- (1) Vocational-Technical Education Enhancement Grants focus on the initiation of new and the improvement of existing occupational preparatory (long-term) vocational education training programs, curriculum enhancement, instructional equipment and facility improvement. The emphasis of the grants is on high demand occupations as determined by local, regional and state occupational data. The funds are available to comprehensive high schools, area vocational schools and community colleges.
- (2) A+ Schools is an initiative which consists of grant awards that are made to public secondary schools that demonstrate a commitment to ensure that: (a)

all students be graduated from high school; (b) all students complete a selection of high school studies that is challenging and for which there are identified learning expectations; and (c) all students proceed from high school graduation to a college or postsecondary vocational or technical school or high wage job with workplace skill development opportunities.

- (3) The Statewide Job Placement Service currently provides job placement assistance and supplemental services to the participating area vocational schools and community and technical colleges throughout the State of Missouri. The state will explore additional opportunities to assist in meeting the core indicators and the state-adjusted levels of performance in Perkins III.
- (4) The Missouri Vocational Resource Center provides a centralized depository for current research, models, curriculum and general information relating to vocational education and a system of access for these materials on a free loan basis by vocational educators within Missouri.
- (5) Missouri has developed a detailed, competency-based system of vocational education. To build on what is currently being implemented and to assist in meeting the reporting requirements of the Act, the Department will research current strategies being used by vocational programs in Missouri and the nation, and provide leadership in disseminating best practices so that an effective instructional management system will be available to all local vocational programs.

d. Vocational Student Organizations (VSOs)

VSOs are an integral part of vocational education. Ten nationally affiliated and approved program-specific vocational student organizations exist and are supported by six Missouri vocational education program areas. Each program area retains a state advisor and support staff to assist in the implementation of VSO activities. In Missouri, approximately 61,000 individuals participate annually in the VSOs. Students are provided with leadership development opportunities relating to their career interests. Such leadership and career development may include: co-curricular instruction and application of program curricula to individual and group activities/projects; local/district/region/state/national leadership conferences and workshops; competitive/skill events; community service opportunities; and individual or group recognition activities involving problem-solving and team work. Special populations and non-traditional students are encouraged to participate in these leadership organizations.

e. Workforce Investment Act Collaboration

- (1) One-Stop Collaboration - The Department anticipates that state and local collaboration under the Workforce Investment Act (WIA) will result in Memorandums of Understanding (MOU) between local Perkins postsecondary recipients and local Workforce Investment Boards (WIBs) and other required one-stop partners that will aid those receiving vocational and technical education in obtaining employment and/or postsecondary education. Such collaboration will aid local recipients and the state in meeting and exceeding state-adjusted levels of performance. Such MOUs will be developed when Missouri submits its Workforce Investment Act State Plan by July, 2000.
- (2) Interagency Staff Training - State agency workforce development partners including the Department, contribute funds for the delivery of cross-agency training to meet the needs of local workforce development staff, including staff of secondary and postsecondary vocational-technical education programs. Funding is provided to the Missouri Training Institute (MTI) located at the University of Missouri-Columbia. MTI provides training on case management, regulatory matters, team work, customer service skills and techniques, and other training identified by local staff.
- (3) Establishment of a Common Database - The Department and other state agency workforce development partners contribute funds to establish and maintain a common database. The database allows aggregate reporting of workforce development program success using state employer earnings records. The state agencies contract with the University of Missouri, Department of Economics, to maintain and establish access to the database. (See Appendix E for Interagency Agreement for an Analysis of the Workforce Development System).
- (4) Interagency Coordination - interagency coordination on workforce activities for all youth and adult vocational and technical education students increases efficiency and reduces duplication of effort and resources. Interagency coordination occurs principally through the Missouri Training and Employment Council (MTEC), the Governor designated State Workforce Investment Board and the One-Stop Career Centers Executive Team. Both venues provide opportunities for discussion on how to achieve and exceed performance levels.

f. Vocational Evaluation and Accreditation

The Missouri State Board of Education established standards for the classification and accreditation of schools which is implemented through the Missouri School Improvement Program (MSIP). The goal of the MSIP process is to promote school improvement within each district and on a statewide basis. To meet this goal, the MSIP “standards and indicators” place greater emphasis on student



achievement and other performance measures. The standards are organized into three sections: Resource Standards, Process Standards and Performance Standards.

Resource Standards: describe the basic programs, staffing patterns and resources that should be present in every Missouri school district. The resource standards are quantitative in nature and dual criteria are used comparing districts with “minimums” determined by the State and what is deemed “desirable” as determined by research and/or professional judgment. Vocational Resources Standards are as follows: 1) a coherent sequence of courses is in place that leads to occupational competence; 2) vocational teachers and administrators have valid, renewable teaching certificates for their specific area of concentration; 3) course offerings are appropriate for meeting needs of students and employers; and 4) the class size is appropriate for the program area.

Process Standards: include standards on Curriculum, Instruction, Differentiated Instruction, Instructional Climate, Library Media Centers, Guidance and Counseling, Professional Development, Governance and Administration, Facilities and Safety, and Support Services. Assessment of the Process Standards is accomplished through an on-site review by a team of trained observers. Process Standards assessed for vocational education include: 1) Vocational education is an integral component of the district’s educational program; 2) Competency-based curriculum is implemented to meet the diversified needs of all students and prepare them for entry into the workplace and/or continued education; 3) Vocational student organizations are in place as intracurricular instructional methods; 4) Vocational education programs provide all students with assistance in the transition to the workplace and/or continued education; and 5) The district implements an accountability system to assess student progress and program effectiveness.

Performance Standards: are assessed in the areas of student achievement, career preparation, and educational persistence. Information on these standards is collected annually and analyzed as a part of the evaluation process. Performance Standards for vocational education are measured in the following ways: 1) the percent of graduates who complete vocational education programs approved by the Department; and 2) the percent of graduates who complete vocational education programs approved by the Department and are placed in occupations relating to their training, continue their education, or are in the military services. The MSIP evaluations are conducted on a five-year cycle. Based on the results of the MSIP process, a local Comprehensive School Improvement Plan (CSIP) is developed that will guide the district in decision-making about what should lead to higher student performance.

As Missouri’s process of comprehensive program evaluation moves from a system of process evaluation to strictly a system of performance evaluation, the

Division of Vocational and Adult Education will develop strategies to perform on-site evaluation and program improvement. This evaluation process may include on-going local evaluations and periodic on-site evaluations by a team of vocational educators.

3. Describe the secondary and postsecondary vocational and technical education programs to be carried out, including programs that will be carried out by the eligible agency to develop, improve, and expand access to quality, state-of-the-art technology in vocational and technical education programs. (Section 122(c)(1)(A))

Missouri's vocational-technical education system is comprised of 57 area vocational schools, 452 comprehensive high school districts, 12 community college districts, one (1) state technical college, seven (7) four-year colleges and universities (multiple campuses) offering two-year associate degrees and certificates, and two (2) state agencies (Corrections and Youth Services). Vocational programs operated by local education agencies that receive state and/or federal funds are approved by the Department of Elementary and Secondary Education. Local education agencies are required to submit program applications based on the *Guide for Submitting Applications for Expanding/New Regular Vocational Education Programs*. Postsecondary program applications are first approved by the Department of Higher Education and then are submitted to the Department of Elementary and Secondary Education for final approval. These entities deliver vocational-technical education instruction in the following six program areas:

**Agricultural Education:** A series of courses have been approved for agricultural education curricula in secondary schools. These are Agricultural Science I (freshman) and Agricultural Science II (sophomore year). For juniors and seniors, single- or double-period courses are taught on a semester or yearly basis in the comprehensive high schools and on a three-period basis for area vocational schools. These specialized courses are for students who have successfully completed the freshman and sophomore courses and have a vocational objective in agriculture. Program of studies in postsecondary agricultural education are degree-related.

**Business Education:** Business education prepares students to meet the challenges of a changing society and workplace. These students work with a variety of technologies and resources to solve business problems. Business courses include basic business principles and keyboarding instruction as well as advanced vocational business instruction in courses that include, but are not limited to, accounting, computer applications, business management, business technology, and computer network administration. A sequence of vocational courses provide students with the knowledge and skills they need to advance in career paths of Administrative Office Systems, Accounting and Finance, Business Management, and Computer Information Systems.

A cooperative education program, Supervised Business Experience, offers students an opportunity to gain valuable workplace skills and facilitates the transition from the classroom to the work environment. Business education is also offered to adults through preparatory and supplemental programs. The adult curriculum is developed to meet the individual training needs of the students and related businesses.

Vocational business education courses offer students the opportunity to develop the knowledge, skills and attitudes necessary to be successful in today's high tech, global workplace as well as serve as a stepping stone to advanced technical training. The vocational student organizations, Future Business Leaders of America (secondary) and Phi Beta Lambda (PBL-postsecondary), are an integral part of the business education program and offer students training in leadership and community service. Both FBLA-PBL provide opportunities for students to compete in business skills and knowledge events on local, state and national levels.

Family and Consumer Sciences Education: A group of instructional programs that prepares youth and adults for the dual roles of work and family. Emphasis is placed on the acquisition of knowledge; the development of attitudes, standards, values, and skills needed for nurturing human development; meeting material needs; career exploration; and strengthening family and community life.

Instruction includes practical knowledge which strongly supports workforce development as well as the integrity of the family unit and/or occupational preparation. This may include a sequence of courses leading to career opportunities in the following areas: career, community and family connections; consumer and family resources; consumer services; early childhood education and services; facilities management and maintenance; family; family and consumer services; food production and services; food science, dietetics and nutrition; hospitality, tourism and recreation; housing, interiors, and furnishings; human development; interpersonal relationships; nutrition and wellness; parenting; and textiles and apparel. Practical problem-solving and critical thinking processes are used within the curricula to reinforce and integrate academic skills. The curricula incorporates new technologies to strengthen personal, career and societal goals. Leadership development is integrated within the curricula through the vocational student organization, Family, Career and Community Leaders of America, formerly FHA/HERO.

Health Sciences (Secondary Programs): The health sciences programs in the secondary setting are currently one- or two-year programs with a two-part emphasis: the core curriculum and an emphasis area. The core competencies include delivery of knowledge and skills common to all health careers such as communication, concepts of microbiology, and the Health Care Delivery System. Students select an emphasis area after completing career exploration and job shadowing. The emphasis area curriculum allows students to master skills at the entry level specific to the choice.

Missouri is exploring a health science sequence of courses to improve academic integration and make a seamless articulation of courses into the adult and postsecondary programs possible. Some courses may be transcribed with a vocational and/or science credit to make the pursuit of secondary vocational education to postsecondary education available to more students.

Health Sciences (Adult and Postsecondary): Adult and postsecondary programs, focusing on Allied Health, are one- or two-years in length and may prepare graduates for certification, licensure, or degree in their chosen health career. The programs are aligned to meet the requirements of the appropriate accrediting body, as well as state department regulations.

Trade and Industrial Education: Trade and Industrial Education courses, while not arranged in a structure which provides sequential courses, are arranged to provide sequential instruction within the specific occupational area. This sequencing provides students the opportunity to progress from global to specific concepts and from general to specialized competence. All programs do integrate academic instruction into the curriculum.

Statewide technical committees composed of representatives from industry and education have determined the appropriate skills needed for entry-level positions in the occupational areas being served in trade and industrial education programs. These competencies are compiled on competency profiles for each specific training area. Curriculum materials have been developed for the trade and industrial education programs which provide sequenced instruction that is driven by the competency profile. In addition, authentic assessment activities are utilized to assess mastery of each listed task.

Specific trade and industrial education programs include secondary and postsecondary offerings in five major cluster areas: Transportation, Service, Construction, Graphics, and Manufacturing.

Marketing and Cooperative Education: Marketing and Cooperative Education programs provide for occupational skills through instruction based upon established curriculum competencies and the application of these competencies to the workplace through cooperative education. These competencies are grouped into more general learner outcomes. These competencies have been developed and validated through the use of a statewide technical advisory committee.

Marketing and Cooperative Education programs, and Marketing Education in particular, have always had strong integration of academic skills in the curriculum. Before a student can meet the competencies in the Marketing and Cooperative Education curriculum they must possess basic academic skills. If the student does not bring these skills upon enrollment, the vocational teacher provides remediation within the program.

The Cooperative Education component of these programs provides further opportunity for development of these basic skills. Instructional Management Plans are school directed activities which allow the student to apply classroom competencies, as well as basic skills instruction and reporting of competency/skill gain.

Technology Education: The Technology Education program is designed to follow the natural pattern of student development by guiding students through a series of courses that progresses through four main levels. All Technology Education courses reinforce the key basics of Missouri's core disciplines and provides rich opportunity for interdisciplinary activities.

The funding provisions for the improvement and development of the local Technology Education program is derived from two sources: 1) the general funding from local and state funds as previously administered; and 2) Perkins III funds for programs which meet the core competencies for entry into a vocational or technical education program.

Technology Education builds technological literacy through developmentally appropriate curriculum integration at four basic levels. These four levels include: technological awareness through activities in grades K-6 (Level I); technological understanding and application in grades 6-9 (Level II); exploration of technology and its foundations in grades 9-12 (Level III); and capstone analysis and synthesis through problem solving of interdisciplinary activities in grades 11-12 (Level IV).

#### Department Approved Vocational Education Programs

There were 2,035 approved secondary vocational-technical education programs for Fiscal Year 1998. State-of-the-art technology programs include robotics, imaging technology, broadcast technology, and computer installation and networking. One program that has grown rapidly over the past two years has been the infusion of the Cisco Networking Academies in both Business Education and Computer Networking classes. The Cisco curriculum package also includes instruction in Novell, Microsoft NT, UNIX, and other industry-identified hardware and software protocols.

At the postsecondary level, there were 1,076 approved vocational education programs for Fiscal Year 1998. Postsecondary state-of-the-art technology programs include electromechanical drafting, laser electro-optics technology, photonics, computer aided/integrated manufacturing technology, computer software engineering and network (using the Cisco Academies).

In addition to the full- and part-time preparatory programs, the vocational education system delivers Customized Training programs to assist companies in training and retraining workers to meet the demands of new technologies and markets.

### Alternative Delivery of Instruction

Distance learning is beginning to expand in Missouri especially through vocational education. Currently in Missouri, over 100 districts have distance learning capabilities which continues to expand.

A number of postsecondary health occupations programs are being conducted via distance learning between an area vocational school and a community college. In the extreme northeastern part of the state, distance learning is being utilized to deliver health occupations programs. This alternative delivery system has increased the opportunity for students to receive both secondary and postsecondary instruction that might otherwise not be available.

Missouri will continue to build upon the current use of distance learning to encourage schools, where applicable, to maximize the use of this state-of-the-art technology in order to expand the vocational delivery system in the state.

4. Describe the criteria that you will use in approving applications by eligible recipients for funds under Perkins III. (Section 122(c)(1)(B)). The eligible agency must submit a copy of the local application for secondary and postsecondary eligible recipients that include the requirements of Section 134 of the Act.

Eligible recipients will be required to submit a local application covering Fiscal Years 2000-2001. Eligible recipients will be required to review and submit modifications to their local application at the end of FY 2001 based on modifications made to the State Plan or changes in local efforts in order to meet the accountability measures set forth in the local application. Annual modifications to local applications will be accepted.

The local application provides operational descriptions of how requested funds should be used to improve, expand, and provide access to quality vocational and technical education programs and services. In addition, the local application details the accountability measures that the eligible recipient and the Department will agree to; a detailed budget narrative which ties the activities and accountability measures to the budget; and assurances signed by the eligible recipient. (See Appendix A for the *Local Guide and Application for Funds* for secondary and postsecondary eligible recipients per the requirements of Section 134(b) of the Act).

Staff of the Division of Vocational and Adult Education will utilize a checklist to verify that all necessary documents have been submitted. They will also utilize the operational description to make final decisions with regard to approval of the local plan.

5. Describe how such programs will prepare vocational and technical education students for opportunities in postsecondary education or entry into high-skill, high-wage jobs in current and emerging occupations. (Section 122(c)(1)(C))

The following criteria will be used to determine how programs prepare vocational and technical education students for opportunities in postsecondary education or entry into high-skill, high-wage jobs in current and emerging occupations. The criteria include:

- a. Programs must be aligned to high-skill, high-wage jobs and opportunities in postsecondary education in current and emerging occupations.
- b. Integrated academic and vocational programs that provide a coherent sequence of courses must be provided.
- c. Teachers must be appropriately certificated with a plan for professional development in place to include externships in business and industry.
- d. Schools must use competency-based curriculum and instructional materials that cover all aspects of the industry being taught.
- e. Classrooms/Laboratories must be conducive to learning.
- f. Up-to-date industry-appropriate equipment must be in place with adequate instructional supplements.
- g. Student vocational assessment services must be available to students.
- h. Vocational student organizations must be in place as intra-curricular instructional methods.
- i. Guidance and placement programs that meet state standards and provide assistance in transition to work and/or postsecondary education must be available to students.
- j. Appropriate support services must be provided to students.
- k. Programs must include activities that lead to the establishment of articulation agreements between secondary schools and postsecondary institutions.
- l. An accountability/evaluation system to assess student progress and program effectiveness must be utilized.

- m. Programs should provide transition-to-work assistance through one or more of the following: experiential education, cooperative education, internships, apprenticeships, job shadowing.

In addition to the above listed criteria, Missouri's Vocational-Technical Education Enhancement Grants utilize high demand occupational data as a basis for awarding grants to schools. These grants are available to upgrade equipment, modify existing curriculum, and update classrooms and laboratories.

Advantage Missouri is a new program, operated by the Department of Higher Education, to encourage students attending approved Missouri postsecondary institutions to pursue training and education to become employed in high demand occupations. The program provides financial assistance in the form of loans to students who participate.

- 6. Describe how funds will be used to improve or develop new vocational and technical education courses. (Section 122(c)(1)(D))

Funds will be utilized in a number of areas to assist in improving existing and developing new vocational and technical education courses.

- a. Development of new programs and expansion of existing programs occurs as a result of reviewing the needs of local business and industry, Missouri Occupational Information Coordinating Committee (MOICC) data being made available to local schools districts, and local advisory committee input. School district officials are encouraged to become members of the local Workforce Investment Boards.
- b. Curriculum will be developed or enhanced with secondary, postsecondary, state department and industry input to improve seamless articulation or employment opportunities. Applied academic curricula/programs will be utilized where necessary. Existing academic and vocational education curricula may be modified to strengthen academic, vocational and technical skills of students. Experiences in all aspects of an industry will be provided to students through incorporation in the curriculum. Students will be taught skills necessary to enter high technology or the telecommunications fields. Business/Education partnerships will be encouraged that provide students with internships and mentoring programs.
- c. Teacher development will be accomplished through collaborative strategies with academic and vocational education teachers. Inservice will be provided to instructors and administrators to improve instructional strategies and may include integration of academic with vocational education. Training of vocational and technical education personnel in the use of new technology will be implemented. Externship programs will be implemented to provide business experience for



teachers. Vocational teacher education programs will be supported. Professional development programs that offer training in state-of-the-art vocational and technical education programs will be provided.

- d. Program evaluation will be accomplished through development of a local vocational program evaluation to assess program effectiveness based on performance measures and standards.
- e. Missouri's Community Careers System began formal implementation in January 1997. This initiative facilitates the creation of a universal, high-quality, career education system which enables students to begin the process of making educated career decisions while in school to more successfully transition into postsecondary education or enter the workplace, or both.

System services are delivered to the student/learner population through locally driven partnerships which consist of: employers; local educational agencies (including representatives of elementary and secondary school districts, area vocational schools, community and technical colleges and four-year institutions, where applicable); local educators (such as teachers, counselors, administrators, or special education personnel); parents; and students; labor organizations or non-managerial employee representatives; and other appropriate entities.

Each local partnership incorporates class-based learning with work-based learning, along with those connecting activities designed to bridge both learning components to allow students and their parents to begin the process of making educated career decisions.

Missouri's Community Careers System has expanded student and teacher access to residential career academies, which are sponsored by education institutes (both secondary and postsecondary), and the employers within the State. These academies are commonly designed as week-long, residential activities which provide an intensive focus on occupational opportunities within a career path.

Within the career academies, an emphasis is placed on:

- Exploration of career and related educational opportunities;
- Team building, problem solving, self-management, and interpersonal communication skill development;
- Development of foundation skills through the use of applied academics; and
- Strong industry connection in the design and delivery of training, exploration, and job shadowing activities.

These concepts and foundations are presented with hands-on application which directly relates to a better understanding of the career opportunities

being explored by the participating educator or student. The ultimate goal of a career academy is to equip the participating teacher or student with the theory and skills which will enable them to make appropriate career decisions.

Among the gains which Missouri's Community Careers System has found as a result of career academies are: students gaining new perspective on careers; parents seeing renewed interest in school by their children; and educators developing an enthusiasm for occupational-based learning.

The Division of Vocational and Adult Education proposes to further support the career academy activity in the State through use of funds made available from the Carl D. Perkins Vocational and Technical Education Act of 1998.

- f. Participation by vocational-technical education personnel in local Workforce Development Board (WIB) activities, including membership on the WIB and Youth Council, will aid in modifying existing and establishing new vocational and technical education courses that are aligned to meet the employment and/or postsecondary education needs of youth and adults.
  - g. Leadership activities may be accomplished through a variety of activities including the involvement of parents, business and labor organizations on advisory committees that participate in the design, implementation, and evaluation of vocational and technical programs.
  - h. Guidance and counseling activities will be accomplished through continued development and/or improvement of existing career guidance activities within the Missouri Comprehensive Guidance Program Model and the Guidance and Placement System for Area Vocational Schools to assist students to consider new and emerging fields in vocational and technical education and to choose appropriate training and coursework. Assistance to participants in finding an appropriate job and continuing their education is provided. Nontraditional training and employment activities will be supported.
  - i. Vocational-Technical Education Program Areas will be strengthened through an emphasis on serving special populations.
  - j. Family and Consumer Sciences programs will receive financial consideration.
  - k. Equipment may be purchased, upgraded or adapted for instructional use.
7. Describe how comprehensive professional development (including initial teacher and counselor preparation) for vocational and technical, academic, guidance, and administrative personnel will be provided. (Section 122(c)(2))

Comprehensive professional development (including initial teacher preparation) will be provided for vocational and technical, guidance, administrative personnel and state agency staff who operate vocational-technical education programs.

Missouri will develop a comprehensive professional development system for vocational and technical, academic, guidance, and administrative personnel. This system will incorporate the current state level professional development activities which have proven to be effective, as well as identify and initiate additional activities to strengthen professional development for Missouri educators.

The following process will be utilized to develop the professional development system:

- a. Establish a Statewide Professional Development Committee - A committee will be established to provide input and oversight for the professional development activities to be conducted by the Division of Vocational and Adult Education. This committee will be composed of, but not limited to, five vocational program directors, the coordinator of vocational programs, the director of guidance, an administrator appointed by the Missouri Council of Vocational Administrators, the chair of the Professional Development Committee representing the Missouri Vocational Association, and one teacher-educator appointed by the State Director of Vocational Education. This committee will be charged with identifying the priorities for statewide professional development, recommending state level professional development activities to the State Director, and reviewing the effectiveness of the state level professional development activities.
- b. Review Data Sources on Professional Development - The committee will review a variety of data sources in order to establish the priorities for state level professional development. These data sources will include: 1) strengths and concerns related to vocational education identified through the Missouri School Improvement Program; 2) supply and demand data for teachers, administrators, and others involved with vocational education programs; 3) information regarding teachers in vocational education programs with less than full vocational certification; 4) information from surveys, workshops, and teacher groups regarding priority topics for professional development; 5) other sources of information on professional development needs to include performance measures and needs of special populations.
- c. Establish State Goals/Objectives and Performance Measures - The committee will establish on an annual basis, State Goals/Objectives and Performance Measures for vocational-technical education professional development. These goals/objectives will support improving the performance measures for the Core Indicators required by the Act. The goals/objectives will also support meeting the Missouri School Improvement Program and vocational education program standards. The goals/objectives will also support Issue II, "The availability of

well-qualified school personnel”, identified by the State Board of Education in the Strategic Plan for the Missouri Department of Elementary and Secondary Education, October 1998.

- d. Collaborative Consortium of Teacher Education - A coordinated and sustained statewide effort will be made to recruit traditional and nontraditional students into vocational and technical teaching. A collaborative consortium of teacher education institutions will be organized to provide improved access to individuals interested in alternative certification opportunities (including 2+2) in vocational and technical education. Financial support will be made for the development and enhancement of laboratory equipment for the training of vocational and technical teachers.
- e. Incorporate Professional Development Plans into Local Application and Evaluation - Local eligible recipients will be required to develop an institutional Professional Development Plan for vocational-technical education. These local plans should be coordinated with other professional development plans at the institution. Each vocational-technical faculty member will be required to have on file a professional development plan. The plan will specify activities which will be delivered to improve the performance measures for the Core Indicators and must include the professional development priorities established by the statewide professional development committee for vocational-technical education. Results of the institutional and individual professional development plans will be included in the annual performance report to the state.
- f. Set Expenditure Requirements for Eligible Recipients - Local recipients will be required to budget no less than 5% of their annual allocation to support institutional and individual professional development plans. The specific uses of these funds will be listed in the Perkins III planning guide. These funds should be used in conjunction with other locally available funds to support professional development for vocational-technical education faculty. The funds made available through this Act may not supplant local professional development funds.

State level professional development activities will include:

- a. Providing preservice and inservice training in state-of-the-art vocational and technical education programs and techniques, including guidance and counseling, effective teaching skills based on research, and effective practices to improve parental and community involvement through:
  - (1) Developing supply and demand data for vocational-technical teachers, administrators, school counselors, and others;
  - (2) Recruiting and retaining vocational-technical teachers, administrators, school counselors, and others;

- (3) Preservice teacher and counselor education programs;
  - (4) New Teacher Institute for Industrial Education and Health Occupations teachers and non-traditional entry workshops;
  - (5) New Teacher Workshops for vocational programs and services;
  - (6) Missouri Council of Vocational Administrators' Leadership Academy.
  - (7) Updating counselors with training using the Missouri Comprehensive Guidance Model and the Guidance and Placement System for Area Vocational Schools through regional new personnel and reunion workshops and Statewide Job Placement inservice;
- b. Help teachers and other vocational education personnel to assist students in meeting the state-adjusted levels of performance established under Section 113 of the Act through:
- (1) Program specific workshops and seminars on integrating academic competencies and assessments.
  - (2) Workshops and seminars reflecting developments in the program areas, such as curriculum standards, assessment tools, inclusion of vocational student organizations, integrating all aspects of the industry, and applied academics inservice for academic and technical personnel.
  - (3) Professional development opportunities for the staff of the Division of Vocational and Adult Education.
- c. Support education programs for teachers of vocational and technical education in public schools and other public school personnel who are involved in the direct delivery of education services to vocational and technical education students to ensure that such teachers stay current with the needs, expectations, and methods of business and industry.
- (1) Support for Missouri Vocational Association Summer Conference.
  - (2) Renewal of vocational-technical teaching certificates based on a continuing program of professional development.
- d. Integrated professional development activities that the State carries out under Title II of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6001 et seq.) and Title II of the Higher Education Act of 1965.

Grants will be made available to teacher education institutions or innovative consortiums offering articulated teacher education programs.

8. Describe how the state will actively involve parent, teachers, local businesses (including small- and medium-sized business), and labor organizations in the planning development, implementation, and evaluation of such vocational and technical education programs. (Section 122(c)(3))

Each program area within either a postsecondary or secondary local education agency (LEA) is to develop a written plan for a program-specific annual program evaluation. A key component of this annual program evaluation is the use of the advisory committees made up of key community stakeholders. Section 178.560, of the Revised Statutes of Missouri, requires each vocational school, school district or college receiving state or federal vocational funds, to appoint and maintain a vocational education program advisory committee to give advice and assistance to the school boards or governing boards in the establishment and maintenance of vocational-technical education programs. These advisory committees must include, but are not limited to, at least one (1) individual representing each of the following groups: parents, students, teachers and administrators, business/industry and labor. Local committees must have appropriate representation of both genders and an appropriate representation of the racial and ethnic minorities found in the area which the committee serves. Local advisory committees must advise the LEA on current job needs, the relevance of programs being offered in meeting current job needs, and developing the LEA annual application for vocational education funding. It is expected that the LEAs will maintain a current roster of all advisory committee members and a file of minutes of advisory committee meetings.

The following matrix describes how the important stakeholders of parents, students, teachers, and business and labor have input in the planning, development, implementation, and evaluation of local vocational-technical education programs.

# STAKEHOLDER INVOLVEMENT IN THE PLANNING, DEVELOPMENT, IMPLEMENTATION, AND EVALUATION OF LOCAL VOCATIONAL AND TECHNICAL EDUCATION PROGRAMS

	STATE AND LOCAL PLAN DEVELOPMENT	IMPLEMENTATION	EVALUATION
PARENTS	Provide input on curriculum and instruction  Provide input on available resources	Serve on advisory committees  Serve as mentors	Participate in annual program evaluation conducted by school and program advisory committees
STUDENTS	Provide input on curriculum and instruction  Provide input on needed equipment	Serve on advisory committees	Participate in annual program evaluation conducted by school and program advisory committees
TEACHERS and ADMINISTRATORS	Design curriculum  Develop and deliver instructional strategies  Assess effectiveness of program  Identify and manage resources	Serve as primary manager of the teaching and learning process  Plan, organize, and implement all facets of program operation	Interpret data and results and incorporate into continuing improvement of the instructional program  Utilize program advisory committees
BUSINESS AND LABOR	Provide input on labor market requirements and policies, technology use  Provide input on curriculum and instruction  Provide input on available resources  Collaborate on work-based learning activities	Provide student internship and teacher externship opportunities, site visits, and instructional resources  Serve as mentors  Serve on advisory committees  Provide work-based learning sites	Provide follow-up information on students in the workplace  Participate in annual program evaluation  Assess relevance of curriculum to the workplace

The Department of Elementary and Secondary Education utilizes the reports from the local vocational programs in evaluating vocational-technical education programs on a statewide basis. In addition, information on the status of vocational-technical education standards in the Missouri School Improvement Program and summary reports are used to evaluate vocational education programs on a statewide basis. Finally, using the same key stakeholder groups identified for the local program advisory committee, representatives from parents, students, teachers and administrators, and business and labor are involved in all state-sponsored curriculum development and enhancement projects. This is especially important in ensuring that the vocational education instructional strategies, learning processes, and occupational competency checklists meet the expectations of the stakeholders.

9. Describe how the eligible agency will improve the academic and technical skills of students participating in vocational and technical education programs, including strengthening the academic, and vocational and technical, components of vocational and technical education programs through the integration of academics with vocational and technical education to ensure learning in the core academic and vocational and technical subjects, and provide students with strong experience in, and understanding of, all aspects of an industry. (Section 122(c)(5)(A))
  - a. General Academic Standards for all Secondary Students - Missouri students participating in vocational-technical education programs must meet all general academic standards required of all secondary students. This includes instruction based on Missouri's Show-Me Academic Standards, instruction based on standards for transition used by ACT, Inc., and achieving the necessary proficiency in the Missouri Assessment Program. In addition, Missouri offers applied courses that meet or exceed the requirements for high school graduation, such as Principles of Technology, applied math, and applied science courses.
  - b. Specific Academic Instruction for Vocational-Technical Students - In addition to the academic instruction vocational participants receive in their general core academic instruction, they also receive academic reinforcement and enhancement in their technical training as well. This is accomplished by all Missouri vocational and technical curriculum being crosswalked to Missouri's Show-Me Academic Standards. Additionally, content knowledge competencies that all vocational educators are required to possess prior to entering the classroom are also crosswalked to Missouri's Show-Me Academic Standards.

Also incorporated into the Missouri vocational and technical education curriculum are Missouri School Improvement Program Standards that are authentic to the program area's employers. These standards and activities include course rationales, scope and sequence, program/instructor resources, and assessment strategies.



Vocational student organizations also play an important role in the overall curricular process by addressing and developing key academic, technical, and leadership skills.

- c. Specific Technical Instruction and Crosswalking to Standards - In addition to Missouri's vocational competencies being crosswalked to state and national subject-area academic standards, all of Missouri's vocational programs that have national standards have been crosswalked to those skill standards. This provides Missouri's students with an in-depth training in nationally-recognized vocational skills that prepare them for the next phase of their educational experience, whether it be occupational employment, initial postsecondary training, or continued postsecondary training.
- d. Entrepreneurship - this concept has been integrated in each vocational program area to support developing student understanding of all aspects of the industry and to provide opportunities for the application and reinforcement of core academic skills in a wide variety of industry-related situations while also preparing students for self-employment and business ownership. Curriculum competencies have been established for units, semester and year-long courses in entrepreneurship. These competencies support developing strong vocational and technical skills as well as core academic skills. The entrepreneurship competencies have been crosswalked to the SCANS competency list to strengthen the integration of entrepreneurship education into the vocational and technical education curriculum. Vocational student organizations have incorporated entrepreneurship education in their programs of leadership development and competitive events.
- e. All Aspects of the Industry - Experiences with *All Aspects of an Industry* and *All Aspects of a Business* in Vocational Education in Missouri is of the philosophy that no vocational-technical instruction is complete without the employing sector providing assistance in the instructional process. For this reason, Missouri's programs all incorporate a wide variety of experiential opportunities for its students, including job shadowing, cooperative, on-the-job training, and apprenticeship opportunities. In addition, curriculum projects are now being crosswalked to the *All Aspects of the Industry* and *All Aspects of Business* publications. These two major publications were developed jointly by the University of Missouri, Institute for Workforce Development, Instructional Materials Laboratory in conjunction with the Missouri Department of Elementary and Secondary Education.
- f. The Role of Postsecondary Articulation in the Strengthening of Academic and Technical Instruction - Through state and federal initiatives such as local articulation agreements, the Missouri A+ Schools Program, and Tech Prep Education, secondary vocational education students are preparing for and actually participating in postsecondary-level education. This is accomplished through articulated credit and dual-credit opportunities between secondary

academic/vocational programs and their counterparts in postsecondary institutions.

10. Describe how the eligible agency will ensure that students who participate in such vocational and technical education programs are taught to the same challenging academic proficiencies as are taught to all other students. (Section 122(c)(5)(B))

Students who participate in Missouri's vocational and technical education programs are taught to the same challenging academic standards as all other students in Missouri's public schools.

Missouri is now implementing the Missouri Assessment Program (MAP), a performance-based system for use by all public schools in the state, as required by Missouri's Outstanding Schools Act of 1993. The MAP is designed to measure student progress toward meeting the Show-Me Standards, 73 rigorous academic performance standards, that were adopted by the State Board of Education in 1996.

To achieve the Show-Me Standards, students must have a strong foundation of knowledge and skills in basic subject areas and be able to apply what they know to real-world problems and new situations. All curriculum in Missouri schools, including vocational education, is required to be cross-referenced to the Show-Me Standards. This provides vocational teachers with the opportunity to reinforce the academic skills needed at the same time they are teaching specific occupational skills. Therefore, the MAP must measure what students know as well as what they can do.

The Missouri Assessment Program covers all six of the subject areas addressed in the Show-Me Standards and state-level assessments have been developed for students in the following grades:

Subject Area	Assessment Grade Levels
Mathematics	Grades 4, 8, 10
Communications Arts	Grades 3, 7, 11
Science	Grades 3, 7, 10
Social Studies	Grades 4, 8, 11
Health/Physical Education	Grades 5, 9
Fine Arts	Grades 5

Three types of test instruments are used to evaluate student achievement in each subject area. They include the familiar multiple-choice test (Terra Nova) , a short-answer ("constructed-response") test, and performance events.

Student performance on these assessments is reported in terms of five (5) performance or achievement levels that describe a pathway of proficiency. Achievement level scores provide a description of what students can do in terms of

the content and skills assessed. The achievement levels ranging from lowest to advanced are:

- Step 1 (Lowest Achievement Level)
- Progressing
- Nearing Proficiency
- Proficient
- Advanced (Highest Achievement Level)

Following are three (3) intervention strategies to assist vocational students who do not do well on the Missouri Assessment Program (MAP):

- (1) Each vocational technical education curriculum is cross-referenced to the State's 73 challenging academic performance standards known as the "Show-Me Standards." This facilitates the integration of instruction and assessment of these academic competencies in vocational-technical education courses. By the integration of academic and vocational education, students in vocational education programs will have the opportunity to develop mastery of the Show-Me Standards, as well as vocational competencies through such classroom intervention strategies as portfolios of student work, application experiences in the classroom and work-based experiences, the vocational student organizations competitive events programs, internships, and other locally developed instruction and assessment methods. This integration of the Show-Me Standards as part of the vocational education curriculum will help those students who score poorly on the Missouri Assessment Program.
- (2) Under provisions of a new state statute passed by the Missouri General Assembly in May 1999, all students performing poorly on the Missouri Assessment Program and scoring at Step 1 on the achievement levels, must receive remediation services and be re-tested. This statutory requirement will be effective with those students taking the MAP tests in the Spring of 2000. All students (including vocational students) who scored poorly, i.e., Step 1, on the Mathematics and Science MAP in Grade 10 and the Communication Arts and Social Studies MAP in Grade 11, will be required to be re-tested. In preparation for that re-testing, area vocational schools will work with high schools in the sending school area and/or Perkins III Consortia, in providing applied academic services in the core subject areas and related vocational education courses, contextual based instruction that integrates academic and vocational education, and the establishment of minimum academic competencies needed for successful experiences in vocational education courses. Vocational education instructors will reinforce academic instruction in vocational education programs where students have minimal skills in mathematics, science, communication arts, and science. Such remediation in vocational education courses will greatly assist students who are to be re-tested in the MAP. Comprehensive high schools and vocational schools will be encouraged to be successful in their remediation

efforts, since the results on remediation services and re-tested students are to be reported in the annual school report cards, the results of the Missouri School Improvement Program, and reports made to the Department of Elementary and Secondary Education

- (3) A new computer applications program, Clear Access, will be made available to the vocational and secondary schools in the Summer of 1999, and appropriate technical assistance will be made available to vocational schools to utilize this program in working with students who score at low levels on the MAP. Specifically, vocational schools and secondary schools will be able to use the Clear Access program to get a listing of students by vocational-technical education program area/course who have scored in each of the five (5) achievement levels. Instructors will then be able to adjust their curriculum to compliment both the academic skill level strengths and the weaknesses of their students, thus assisting the students in attaining both strong academic competencies and occupational competencies.

Postsecondary students' academic proficiencies are measured by student ability to complete programs resulting in certification, licensure, or degree. Many postsecondary programs are aligned with national certification programs such as Automotive Service Excellence (ASE), American Welding Society (AWS), and Printing Institute of America (PIA) which include a strong emphasis in academics. In addition, many postsecondary programs must follow licensure requirements such as License Practical Nurse (LPN) and Child Development Associate (CDA) in order to confer certificates and degrees.

11. Describe how the eligible agency will provide local education agencies, area vocational education schools, and eligible institutions in the State with technical assistance.

State vocational education staff are responsible for working with individual schools and consortia on an assignment basis. Each staff member will provide local administrators, teachers, and other vocational educators with technical assistance in a variety of ways: on-site visits, telephone, regional and local workshops, Interactive Television (distance learning), statewide conferences, and collaboration with other state and regional agencies. The majority of technical assistance will be delivered in three core areas and may include:

- a. Administration

- (1) Developing and refining local plans;
- (2) Complying with state and federal regulations;

- (3) Developing programs that will prepare students for postsecondary education or entry into high wage employment;
- (4) Providing professional development opportunities;
- (5) Formulating strategies and methods for assuring access and participation for special populations;
- (6) Assuring the integration of vocational and technical and academic competencies;
- (7) Linking secondary and postsecondary programs (Tech Prep);
- (8) Developing and maintaining articulation agreements between secondary and postsecondary education.

c. Accountability

- (1) Orientation to accountability requirements;
- (2) Setting and refining local levels of performance to align with State levels of performance;
- (3) Developing systematic and consistent data collection methods;
- (4) Developing procedures and strategies for reporting valid and reliable data;
- (5) Developing intervention strategies to ensure improved student performance;
- (6) Assuring special populations meet the same academic and vocational standards as other students.

d. Program Improvement

- (1) Developing an evaluation process for all programs;
- (2) Developing new programs;
- (3) Using performance data to improve programs;
- (4) Identifying needs for postsecondary programming;
- (5) Using Missouri's School Improvement Program to strengthen vocational and technical education;

- (6) Integrating skill standards into vocational and technical education;
- (7) Assuring success of members of special populations in vocational education programs.
- (8) Using the Missouri Comprehensive Guidance Program Model and the Guidance Placement System for Area Vocational Schools to provide training to new personnel and current practitioners. Guidance and placement will also continue to develop resource materials and work on research and evaluation.

In addition, vocational programs provide support and technical assistance for the integration of entrepreneurship education. Missouri maintains a membership in the Entrepreneurship Consortium, a national level organization for the support of entrepreneurship education. Through this consortium, resources, model programs, and leadership for the integration of entrepreneurship education are provided to local education agencies, area vocational and technical education schools, and eligible institutions in the state.

State staff will be working with local education agencies to improve the participation of parents, the business community, and other interested individuals in vocational education. In addition, the provisions of the Workforce Investment Act including core indicators, program evaluation, program success, and other elements shared with Perkins III will be discussed with local recipients.

12. Describe how vocational and technical education relates to State and regional occupational opportunities. (Section 122(c)(15))

The Department's Assistant Commissioner for Vocational and Adult Education is a member of the Governor designated state workforce investment board, the Missouri Training and Employment Council. As a member of the Council, the Assistant Commissioner is in a position to relate the occupational opportunities identified by private sector members of the Council to local recipients of state and federal vocational and technical education funds. Further, participation by vocational-technical education personnel on local Workforce Development Board (WIB) activities, including membership on the WIB and Youth Council, will aid in relating vocational and technical education to regional employment and/or postsecondary occupational opportunities.

Each area vocational school is required to establish an advisory committee for every vocational education program. Members on these committees provide guidance and information on occupations and labor market needs in their local communities.

The Missouri Occupational Information Coordinating Committee (MOICC) gathers and disseminates labor market information. MOICC makes training available to area vocational school and community college staff on how to use this information and

provide guidance to students. MOICC's labor market information is available on both the local, state and national level. In addition to general information about the labor market, it identifies occupations that are in demand and potential areas of growth.

Missouri's CHOICES program, available at many high schools, area vocational schools, community colleges, and One-Stop Career Centers provides local and state occupational specific information. This information provides students and their parents an opportunity to learn more about specific occupations and careers and make better career choices.

Advantage Missouri is a new program, operated by the Department of Higher Education, which provides student financial assistance in the form of loans to encourage eligible students attending approved Missouri postsecondary institution to pursue training and education to become employed in high demand occupations such as computer networking and bio-technologies. Eligible postsecondary institutions include area vocational schools, private proprietary schools and public community and technical colleges, as well as public and private four-year colleges and universities.

Vocational-Technical Education Enhancement Grants focus on the initiation of new and the improvement of existing occupational preparatory (long-term) vocational education training programs, curriculum enhancement, instructional equipment and facility improvement. The emphasis of the grants is on high demand occupations as determined by local, regional and state occupational information.

Missouri recently established a statewide system of vocational consortiums called Regional Technical Education Councils (RTECs). RTECs collaborate with area vocational schools, community colleges, career schools and other public and private colleges and universities to design quality, high-demand technical education programs and courses.

State and regional occupational opportunities show continued strong job growth in small businesses. The integration of entrepreneurship education into the vocational education curriculum supports preparing students for self-employment and employment opportunities in small business.

13. Describe the methods proposed for the joint planning and coordination of programs carried out under Perkins III with other Federal education programs. (Section 122(c)(16))

As required by State Government Administrative Rules and Regulations, the Department annually updates its Strategic Plan which serves as the basis for budget requests before the Missouri General Assembly and Department program operation. The Strategic Plan lists the goals, objectives, outcomes and strategies the Department

will employ to maintain high academic achievement for all students. The Department's plan serves as a focal point to coordinate federal and state educational programs under the auspices of the Department to achieve high academic standards. Staff from each of the six divisions in Department draft and revise the Department's Strategic Plan. However, it is the six Assistant Commissioners, to include the Assistant Commissioner for Vocational and Adult Education, and the Commissioner of Education who must sign off on the Department's final Strategic Plan.

The Assistant Commissioners meet with the Commissioner of Education during at least two regularly scheduled meetings per month and additional meetings as needed in an effort to continually coordinate the Department's activities. It is through these regularly scheduled meetings that the Division of Vocational and Adult Education completes joint planning and coordination with other federal education programs per Section 122(c)(16) of the Perkins III Act. Examples of past collaboration include preliminary work on consolidated state planning related to the Improving the America's Schools Act and Goals 2000, Educate America Act on the federal level and the Show-Me Technology Plan and Show-Me Academic Performance Standards, on the state level. The most recent evidence of this successful planning was the issuance of a joint Cooperative Agreement between the Divisions of Special Education, Vocational Rehabilitation, and Vocational and Adult Education regarding the Cooperative Work-Experience Program. These same procedures will be used through the implementation of Perkins III in Missouri.

14. Describe how funds will be used to effectively link secondary and postsecondary education. (Section 122(c)(19))

The State of Missouri places an emphasis on the development and maintenance of strong comprehensive links between secondary schools and postsecondary institutions. Tech Prep education continues to develop, implement and maintain four-year programs (2+2) to provide Tech Prep education career paths leading to a two-year associate of applied sciences degree or apprenticeship programs that focus on high-skilled technical occupations. Links between secondary and community colleges and baccalaureate degree-granting institutions (2+2+2) will be developed or strengthened. Funds will be used to strengthen the link between secondary and postsecondary education through the following venues:

- a. Articulation agreements will be developed between secondary schools and postsecondary institutions to provide students with a non-duplicative sequence of progressive achievement leading to degrees or certificates in vocational-technical education programs.
- b. Tech Prep consortiums will develop and implement articulation agreements, develop a plan for improvement to address the negative findings of evaluations of any previously funded Tech Prep grant, provide and coordinate activities among consortium participants for curriculum development including integration of



academics and vocational competencies, develop partnerships between schools and businesses, and provide counselor education. Other Tech Prep activities include educator externships to assist secondary and postsecondary teachers in staying current in needs, expectations and methods of business in all aspects of the industry and training academic teachers in the use of contextual and applied curricula and instruction.

- c. The Missouri A+ Schools Program is an initiative to help local high schools reduce the dropout rate, eliminate the general track curriculum, and provide better career pathways for all students. This program encourages the adoption of more rigorous standards by local schools plus better coordination among high schools, area vocational schools and community and technical colleges. The mission of A+ Schools is to assure that all students, when they graduate, are well-prepared to pursue advanced education or employment or both. Currently, there are 86 approved A+ Schools with at least 100 more schools granted A+ status within the next 5 years.
- d. Regional Technical Education Councils (RTECs) have been approved by the Department of Higher Education for the purpose of supporting workforce preparation including postsecondary technical education courses, programs and services including Tech Prep education at the regional level. These councils represent the community college service areas in the state. Area vocational schools included within these regions are considered as co-partners in this regional delivery system.

RTECs are comprised of representatives of the constituencies served through the regional plans and the regional providers of postsecondary technical education including, but not limited to, regional employers, labor organizations, area vocational schools, local government, comprehensive high schools, vocational education advisory committees, School-To-Work partnerships, community and technical colleges serving the region, and public and private baccalaureate degree-granting institutions within the region.

The goals of the RTECs include: 1) determining avenues to expand the accessibility of postsecondary technical education within an identified region; 2) encouraging support from regional employers and labor organizations; and 3) enhancing a regional instructional infrastructure for the development of the associate of applied sciences degree program delivery system.

Planning on the regional level includes: 1) assessing and analyzing regional needs for enhancing existing and development of new programs, courses and services; 2) identifying what and how the programs and services can best be provided collaboratively; and 3) estimating the costs for such development and services provided.

15. Describe how the eligible agency will address the equity provisions contained in Section 427(b) of the General Education Provisions Act, as amended (20 U.S.C.1228a)

Section 427 of the General Education Provisions Act (GEPA) requires each applicant for funds to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its Federally-assisted programs for students, teachers, and other program beneficiaries. Eligible local recipients will describe in their application for Perkins III funds the steps to be taken to overcome the barriers of gender, race, national origin, color, disability, or age. The information may be provided in a single narrative, or, if appropriate, may be discussed in connection with related topics in the application.

Staff in the Department's Division of Vocational and Adult Education will ensure that equal opportunities are available for teachers to participate in professional development activities by providing the necessary supportive services for them to fully participate in the activities. Department staff will also provide technical assistance to local recipients to help them identify and overcome barriers to equitable participation to include barriers based on gender, race, color, age, national origin, or disability.

State-level vocational education staff also conduct on-site visits and monitor compliance with Office of Civil Rights policies. Technical assistance is provided to institutions as they develop strategies to assure nondiscrimination.

16. Describe the procedures in place to develop the memoranda of understanding outlined in Section 121(c ) of the Workforce Investment Act of 1998. (Section 122(c)(21))

Missouri plans to submit its State Plan under the Workforce Investment Act (WIA) on or about April 2, 2000, for implementation on July 1, 2000. The plan is being developed by the Division of Workforce Development in the Department of Economic Development under the auspices of the Missouri Training and Employment Council (MTEC). MTEC is the Governor-designated Workforce Development Board. The Assistant Commissioner of Vocational and Adult Education is a member of the executive committee of the council as well as a member of the full council.

The Missouri Training and Employment Council identified the State workforce investment areas as required under WIA at its May 20-21, 1999 meeting, and recommendations have been made to the Governor for formal designation. MTEC is Missouri's State workforce investment board. The Governor should make his formal designations by July 1, 1999.

Standards for local workforce investment board membership and certification will be written and approved by MTEC at its August 2-3, 1999 meeting. This information

will be distributed to chief local elected officials with local workforce investment board members to be designated on or before September 1, 1999.

Local WIA plan requirements and instructions will also be approved by MTEC in August and will be relayed to local areas and boards prior to September 1, 1999.

On-site technical assistance on local plans and Memoranda of Understandings (MOUs) will begin on September 1, 1999. In preparation for this activity, the Assistant Commissioner of Vocational and Adult Education distributed in June 1999, the results of a recent customer focus group study on desired services at local one-stop career centers, to all vocational school directors and community college occupational deans. Special interest sessions on the nature of MOUs, the focus group study, and the art of negotiation will be highlighted at the meeting of the Missouri Council of Vocational Administrators during the Missouri Vocational Association Annual Conference in July 1999. Information on the action of MTEC regarding local workforce investment boards will be distributed to vocational directors and community college deans in August 1999, in preparation for the MOU technical assistance efforts in September 1999. As the MOUs will be critical to the development of local investment board plans, staff from the Department of Elementary and Secondary Education will play a key role in the on-site technical assistance. Staff will work in cooperation with other State workforce development parties to aid local postsecondary Perkins III recipients to participate in the MOU process to the fullest extent.

According to the MTEC planning schedule, local workforce investment plans are to be submitted by December 31, 1999. Between September 1, 1999 and the end of December, all MOUs will be completed and submitted to the Department of Elementary and Secondary Education for review and comment. MTEC will act on all local plans and MOUs in January 2000.

Staff of the state workforce development partners, including the Division of Vocational and Adult Education, have been reviewing compliance factors with the Workforce Investment Act and the Interim Final Regulations from the U.S. Department of Labor as well as guidance from the Office of Vocational and Adult Education to develop draft MOU contents. While MOUs will be individually negotiated at the local level, the minimal MOU requirement in Missouri will include the following information:

- ◆ Description of services to be offered through/by the one-stop career centers as they relate to postsecondary vocational technical education
- ◆ How the cost of operations will be paid
- ◆ Methods of referral for customers
- ◆ Dollar amount of cash or in-kind contributions for services
- ◆ Duration of MOU
- ◆ Evaluation of MOU

- ◆ Amendment provisions
- ◆ Other provisions locally identified

17. Describe the procedures to ensure coordination of non-duplication among programs listed in Section 112 (b)(8)(A) of the Workforce Investment Act of 1998. (Section 122(c)(21))

Interagency Coordination: Missouri's Governor by Executive Order 95-11, dated May 12, 1995, charged the directors of state agencies providing or supporting education and job training, including the Departments of Economic Development, Labor and Industrial Relations, Social Services, Higher Education and Elementary and Secondary Education to work as an interagency team to implement a statewide workforce development plan based upon the recommendations of the Missouri Training and Employment Council (MTEC). The State Director of Vocational Education is a member of the One-Stop Career Centers Executive Committee established under the Governor's Executive Order. Meetings of the One-Stop Executive Committee result in better communication, the development of cooperative arrangements and identification and non-duplication of services.

Role in State Workforce Investment Board: The State Director of Vocational Education is a member of the Missouri Training and Employment Council which was designated by the Governor as the state's Workforce Development Board. The Council is charged by the Governor with developing a statewide workforce development plan. The Council serves as an overall strategic planning body for the five workforce development agencies identified in the Governor's Executive Order 95-11.

In addition to vocational education, other federal legislation discussed and/or coordinated through MTEC includes:

- Wagner-Peyser
- Vocational Rehabilitation
- Temporary Assistance for Needy Families (TANF)
- Food Stamp Act
- Older Americans Act
- Trade Act
- Job Counseling, Training and Placement Services for Veterans (Chapter 41 of Title 38)
- Community Service Block Grant
- National and Community Service Act
- Housing and Urban Development
- Unemployment Insurance Laws

The Council has been designated by the Governor as the state workforce development board required under WIA. The Council will serve as the focal point for review,

comment and recommendations on the coordination of workforce development activities under WIA and other federal and/or state programs. The Department has forwarded a copy of its proposed state plan to MTEC for review and comment.

As Missouri develops its Workforce Investment Act (WIA) State Plan, the Department of Elementary and Secondary Education will work collaboratively with MTEC and the Department of Economic Development (the state agency responsible for Title I programs under WIA) and other appropriate state and local agencies to jointly develop a single set of procedures that will be used to fulfill the coordination requirements under Title I of WIA and Perkins III. The Department will review its response to Requirement Number 17 in Section II of the State Plan Guide for vocational education by April 1, 2000 to ensure that the State Plan submitted by the Governor under Title I of WIA contains the same information with respect to coordination among various Federal programs that is cited in the State Plan for Vocational Education.

18. Describe the role of postsecondary vocational and technical education in the One-Stop Career Center delivery system established by WIA and the collaborative approach to the development of guidance with respect to participation in the One-Stop delivery system (as contained in “procedural suggestions”).

The state’s area vocational schools and community colleges have been active in the development of One-Stop Career Centers in Missouri. The state required all of the labor market areas to establish Interagency Teams comprised of local representatives of each of the five (5) state agencies involved in workforce development. Each of the 15 state labor market areas had at least one (1) representative from either an area vocational school or community college. The teams were responsible for developing a One-Stop Business Plan for the area. The plan included the identification of full-service and satellite One-Stop Career Center locations and plans for utilizing training and technology funds which the state granted to each labor market area on a competitive basis. Approximately 30 sites are located at area vocational schools, community colleges, and one (1) four-year institution that provides postsecondary vocational opportunities.

With nearly 30 satellite or full-service One-Stop Career Centers located at area vocational schools, community colleges, or four-year institutions, there is already a collaborative approach to the development of guidance with respect to participation in the One-Stop Delivery System. This collaboration will be strengthened as Missouri completes its State Plan for Workforce Development by April 1, 2000.

19. Each eligible agency shall describe how its comprehensive professional development activities will focus on improving the academic and technical skills of students and ensuring that vocational and technical education students are taught the same challenging academic proficiencies as are taught to other students.

Per the requirements of the Missouri Outstanding Schools Act of 1993, the State Board of Education and the Department worked with teachers (including vocational education teachers), school administrators, parents, and business professionals in the development of 73 rigorous academic performance standards. These process and subject matter content standards, known as the Show-Me Standards, were adopted by the State Board in 1996 and are the basis for the new testing program known as the Missouri Assessment Program.

Both preservice and inservice professional development activities receiving federal funds will ensure that vocational educators receive instruction regarding the crosswalk of the state's vocational and technical education curriculum with the Missouri Show-Me Academic Standards as well as the Missouri Assessment Program which is based on those standards.

### III. ACCOUNTABILITY AND EVALUATION

#### A. Requirements

1. Describe the procedures employed to include input from eligible recipients in establishing the core indicators of performance (Section 113(b)(I)(A) and Section 113(b)(2)(D)), the state level of performance for each core indicator of performance (Section 113(b)(I)(C)(9) and Section 122(c)(9)), any additional indicators of performance (Section 113(b)(I)(B)) and state levels of performance for each additional indicator of performance (Section 113(b)(1)(C)).

The State of Missouri developed a strategy to provide a number of opportunities for eligible recipients to provide comment on the accountability and evaluation system to be utilized by the State in compliance with Section 113(b)(1) of the Act. Reports were made to and comments requested from the Missouri Council of Vocational Administrators members at the Fall Leadership Conference in October, 1998 and the Legislative Appreciation Day in February, 1999. The Missouri Association of Community Colleges was also consulted in March, 1999. Both of these groups provided essential information regarding the core indicators and the levels of performance. Directors of area vocational schools, community and technical college deans, and representatives of four-year institutions offering vocational education programs met with state representatives to discuss specific indicators of performance and levels of performance. The Office of Social and Economic Data Analysis, an organization affiliated with the University of Missouri-Columbia, was included in the discussions about the methodology to be used in determining the levels of performance for Core Indicator Number One regarding academic attainment utilizing the Missouri Assessment Program (MAP). Council for Career and Technical Education Department of the University of Missouri was consulted regarding the establishment of performance measures and levels of performance for vocational and occupational skill attainment.

A draft of the Missouri State Plan for the Carl D. Perkins Vocational and Technical Education Act of 1998 was placed on the web site of the Department of Elementary and Secondary Education. This web site offered an opportunity for any individual to provide written comment on the State Plan using return e-mail, fax or mail. Six public hearings were held to discuss the draft State Plan. Written comments were collected from participants and are included in the State Plan. A significant portion of these comments regarded the proposed accountability and evaluation standards. A response was written for the comments and is included in the State Plan. Comments from all sources were separated into areas of responsibility and assigned to Department teams. A team of local vocational education administrators met with department staff to review the performance measures and levels of performance, as well as the local reporting requirements. This professional group included high school principals or superintendents of comprehensive high schools, area vocational

school directors, community and technical college deans, and representatives from four-year institutions.

Based on input from practitioners in the field and Department staff discussions, no additional indicators of performance were identified. It was deemed important to concentrate on successful attainment of the four (4) core indicators cited in the Act.

2. Identify and describe the core indicators (Section 113(b)(2)(A)(i-iv)), a State level of performance for each core indicator of performance for the first two program years covered by the State plan (Section 113 (b)(3)(A)(ii)), any additional indicators identified by the eligible agency (Section 113)(b)(2)(B)) and a State level of performance for each additional indicator (Section 113(b)(3)(B)).



# MISSOURI CORE INDICATORS OF PERFORMANCE – SECONDARY

	Column 2	Column 3	Column 4	Column 5	Column 6
	Measurement Definition	Measurement Approach	Method and Years for Estimating Baseline	Final Agreed-Upon Baseline Level	Final Agreed-Upon Performance for 2000-2001
1	<p>Numerator: Total number of concentrators scoring in the top 3 levels of achievement on the Missouri Assessment Program</p> <p>Denominator: Total number of concentrators taking the Missouri Assessment Program</p>	<p>State Academic, Standards and Assessment System</p> <p>The Missouri Assessment Program (MAP) is a State developed academic assessment system with specified levels of performance for all elementary and secondary school districts. MAP is designed to measure student progress toward meeting the seventy-three (73) state-adopted rigorous academic performance standards.</p>	<p>Average 2 most recent years (FY98-FY99)</p> <p>FY97 was a field test year for data</p>	46.19%	47.19%

<p>Numerator: Total number of concentrators mastering 80% of the state-approved and locally adopted identified essential skills</p> <p>Denominator: Total number of concentrators</p>	<p>State/Local Standards and Assessment System</p> <p>All State-approved vocational and technical education programs are required to have a competency-based curriculum, with an assessment system for measuring mastery of identified competencies. Student mastery of identified competencies must be recorded in an Instructional Management System (IMS).</p>	<p>Average 3 most recent years (FY97-FY99)</p>	<p>85.75%</p>	<p>86.75%</p>
<p>Numerator: Total number of completers</p> <p>Denominator: Total number of concentrators</p>	<p>State/Local Administrative Data</p> <p>The local education agencies will annually report the number of vocational education concentrators for the institution in the reporting year. Of the total number of concentrators, the local education agencies will report the number that complete secondary education or obtain a high</p>	<p>Average 3 most recent years (FY97-FY99)</p> <p>The baseline data for completion will be established using the statewide graduation rates for all high school students. Baseline data does not currently exist for vocational education concentrators. This data will be available following the first reporting year (FY2000).</p>	<p>79.09%</p>	<p>80.09%</p>

		school equivalency. High School graduation in Missouri is based on state-established graduation requirements.			
Numerator: Total number of completers receiving a national, state, or local credential  Denominator: Total number of completers	State/Local Administrative Data  The local education agencies will annually report the number of vocational education completers for the institution in the reporting year. Of the total number of completers, the local education agencies will report the number that receive a high school diploma or obtain a high school equivalency and receive a local, state or national credential that includes but is not limited to: license, certification, portfolio or other credential documenting proficiency.	Average 3 most recent years (FY96-FY98)  The state conducted a limited survey of area vocational schools and reviewed internal materials to ascertain what percent of student graduating earned a credential. The survey indicated only a limited number of credentials are issue following graduation from high school. Of those institutions issuing a Portfolio of Student Performance, the results were that only 20% of the program completers received the credential. The only other credentials issued, upon graduation from high school, were for passing the license exam for Certified Nurses Aid and Medication Technician. However, no data was	20.00%	21.00%	

			available for these two credentials. Data will be collected for other programs recently instituted such as CISCO and MOUS. The state level of performance for this measure will be established at 20%.		
<p>Numerator: Total number of completers placed in postsecondary education or advanced training, military or employment</p> <p>Denominator: Total number of completers</p>	<p>State Developed and Locally Administered Surveys/Placement Records</p> <p>The local education agencies will report the total number of vocational education completers of a state-approved occupational vocational education program with a high school diploma or a high school equivalency. A follow-up will be conducted one hundred and eighty (180) days following the student's exit from the program. This follow-up will be conducted by the local education agency following state-established guidelines. The local education agency will report the number of completers placed in</p>	<p>Average 3 most recent years (FY96-FY98)</p> <p>Historical placement data is available for all occupational vocational education graduates. This historical data will be used to establish the baseline for the level of performance for this indicator.</p>	90.21%	90.21%	

		postsecondary education or advanced training, employment or the military service for the preceding year.			
	Numerator: N/A  Denominator: N/A	N/A	N/A	N/A	N/A
	Numerator: Total number of underrepresented secondary vocational students participating in nontraditional vocational programs  Denominator: Total number of secondary vocational students participating in nontraditional vocational programs	State/Local Administrative Data  Nontraditional students are determined by using a list of occupations that have twenty-five percent (25%) or less of those employed of one gender. Participants (male and female) will be those students enrolled in courses identified as nontraditional based on the list of non-traditional occupations and corresponding CIP codes provided by the U.S. Department of Education.	Average 3 most recent years (FY97-FY99)	28.60%	29.10%
	Numerator: Total number of underrepresented secondary vocational participants completing nontraditional vocational	State/Local Administrative Data  Nontraditional students are determined by using a list	Average 3 most recent years (FY97-FY99)	17.45%	17.95%

	<p>programs</p> <p>Denominator: Total number of secondary vocational participants completing nontraditional vocational programs</p>	<p>of occupations that have twenty-five percent (25%) or less of those employed of one gender. Completers (male and female) will be those participants who have completed courses identified as nontraditional based on the list of non-traditional occupations and corresponding CIP codes provided by the U.S. Department of Education.</p>			
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# MISSOURI CORE INDICATORS OF PERFORMANCE - POSTSECONDARY

	Column 2	Column 3	Column 4	Column 5	Column 6
	Measurement Definition	Measurement Approach	Method and Years for Estimating Baseline	Final Agreed-Upon Baseline Level	Final Agreed-Upon Performance for 2000-2002
	<p>Numerator: Total number of concentrators scoring at or above the 55<sup>th</sup> percentile on a nationally norm academic assessment</p> <p>Denominator: Total number of concentrators taking a nationally norm academic assessment</p>	<p>State Approved Academic Standards and Assessment System</p> <p>The State will provide the postsecondary institutions with a list of state-approved, nationally developed academic assessment instruments. The postsecondary institutions will administer these assessments to all students identified as vocational concentrators.</p>	<p>Average 3 most recent years (FY97-FY99)</p> <p>A survey was conducted of all postsecondary institutions during the month of August 2000, to determine baseline data for this subindicator. Institutions surveyed included (5) area vocational schools, (12) community colleges, (1) technical college, and (4) four-year institutions.</p>	70.17%	71.17%
	<p>Numerator: Total number of concentrators mastering 80% of the state-approved and locally adopted identified essential skills</p> <p>Denominator: Total number of concentrators</p>	<p>State/Local Standards and Assessment System</p> <p>All State-approved vocational and technical education programs are required to have a competency-based curriculum, with an assessment system for measuring mastery of</p>	<p>Average 3 most recent years (FY97-FY99)</p>	94.02%	94.02%

		identified competencies. Student mastery of identified competencies must be recorded in an Instructional Management System (IMS).			
Numerator: Total number of completers  Denominator: Total number of concentrators	State/Local Administrative Data  The local education agencies will annually report the number of postsecondary vocational education completers receiving a postsecondary degree or credential and the total number of completers of a vocational education program for the reporting year.	Average 3 most recent years (FY96-FY98)	86.09%	87.09%	
Numerator: Total number of completers placed in postsecondary education or advanced training, military or employment  Denominator: Total number of completers	State Developed and Locally Administered Survey/Placement Records  The local education agencies will report the total number of postsecondary vocational education completers that complete a Department approved occupational vocational education	Average 3 most recent years (FY97-FY99)	84.49%	85.49%	



		<p>program and exits postsecondary education with a degree, certificate or other credential. A follow-up will be conducted one hundred and eighty (180) days following the student's exit from the program. This follow-up will be conducted by the local education agency following state-established guidelines. The local education agency will report the number of completers placed in postsecondary education or advanced training, employment and/or the military service for the preceding year.</p>			
<p>Numerator: Total number of completers retained in employment</p> <p>Denominator: Total number of completers placed in employment</p>	<p>State Administrative Record Exchange</p> <p>Postsecondary retention will be congruent with the Workforce Investment Act (WIA) and will measure retention in employment one year after the 180 day follow-up study performed after graduation.</p>	<p>Average 3 most recent years (FY97-FY99)</p>	84.49%	85.49%	

<p>Numerator: Total number of underrepresented postsecondary students participating in nontraditional vocational programs</p> <p>Denominator: Total number of postsecondary students participating in nontraditional vocational programs</p>	<p>State/Local Administrative Data</p> <p>Nontraditional students are determined by using a list of occupations that have twenty-five percent (25%) or less of those employed of one gender. Participants (male and female) will be those students enrolled in courses identified as nontraditional based on the list of non-traditional occupations and corresponding CIP codes provided by the U.S. Department of Education.</p>	<p>Average 3 most recent years (FY97-FY99)</p>	<p>30.59%</p>	<p>31.09%</p>
<p>Numerator: Total number of underrepresented postsecondary students completing nontraditional vocational programs</p> <p>Denominator: Total number of postsecondary students completing nontraditional vocational programs</p>	<p>State/Local Administrative Data</p> <p>Nontraditional students are determined by using a list of occupations that have twenty-five percent (25%) or less of those employed of one gender. Completers (male and female) will be those participants who have completed courses identified as nontraditional based on the list of non-</p>	<p>Average 3 most recent years (FY97-FY99)</p>	<p>15.20%</p>	<p>15.70%</p>

		traditional occupations and corresponding CIP codes provided by the U.S. Department of Education.			
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- a. Core Indicator Number 1: Student attainment of challenging state established academic, vocational and technical skill proficiencies.

(1) Secondary Academic Proficiencies:

The State of Missouri implemented a performance-based assessment system used by all public secondary schools. The Missouri Assessment Program (MAP) is one of several educational reforms mandated by the Outstanding Schools Act of 1993. As a result of that Act, the State Board of Education directed the Missouri Department of Elementary and Secondary Education (DESE) to identify the knowledge, skills, and competencies that Missouri students should acquire by the time they complete high school, and to assess student progress toward those academic standards. DESE worked with teachers, including vocational educators, school administrators, parents, and business professionals from throughout the state to develop the Show-Me Standards, a set of 73 state-adopted rigorous academic performance standards. DESE has worked with the same constituencies to develop an assessment system, the MAP, that will evaluate students' proficiencies represented by the Show-Me Standards.

The MAP includes Mathematics Assessments for Grades 4, 8, and 10; Communication Arts Assessments for Grades 3, 7, and 11; Science Assessments for Grades 3, 7, and 10; and Social Studies Assessments for Grades 4, 8, and 11. The assessment requires three hours of test administration time and includes three types of test items: multiple-choice, constructed-response, and performance events.

Multiple-Choice

The multiple-choice component of the assessment is the survey portion of a new nationally-normed test developed by CTB/McGraw Hill. It presents students with a question followed by four or five response options, one of which is correct. Results may be compared to other nationally-normed tests.

Constructed-Response

The constructed-response items require students to supply (rather than select) an appropriate response. Students are asked to show their work in solving a problem. In addition to measuring students' content knowledge, constructed-response items can provide information about how students arrive at their answers.

Performance Events

The performance events used in Missouri's statewide assessment requires students to work through more complicated problems. Performance events often allow for more than one approach to arrive at a correct answer. The

advantage of this type of assessment is that it provides insight into a student's ability to apply knowledge and understanding in various situations. Student performance is reported in terms of five performance, or achievement, levels that describe a pathway to proficiency. Each achievement level represents standards of performance for each content area assessed in Communication Arts, Math, Science, Social Studies, Fine Arts, and Health/Physical Education. Achievement Level scores provide a description of what students can do in terms of the content and skills assessed. The achievement levels ranging from lowest to advanced levels are:

- Step 1 (Lowest Performance Level)
- Progressing
- Nearing Proficiency
- Proficient
- Advanced (Highest Performance Level)

The MAP results for mathematics, science, communications arts and social studies will be measured for all students that have taken a vocational-technical education course by the eleventh grade. Mathematics and Science testing is done at the tenth (10<sup>th</sup>) grade and communication arts and social studies are taken at the eleventh (11<sup>th</sup>) grade.

MAP data disaggregated by vocational student participation in vocational education is presently available. Arrangements have been made with CTB McGraw-Hill to develop a means of collecting and reporting data based on student participation in vocational education. This data will be available in the 1999-2000 school year. The results will be available in September each year. Baseline data will be established for each subject area as the results become available. The following MAP Implementation Chart (See Page 95) indicates the year data will become available and at what point baseline data will be established. The performance measures will be based on the first two years of data for each subject. The state has established, as a part of the Missouri School Improvement Program, a three percent (3%) increase in performance for the accreditation of public elementary and secondary school districts not meeting state-established levels for high achievement. Vocational education programs will be held to these same performance standards.

MAP data for vocational education students will be disaggregated by gender, race, ethnicity, disability and limited English speaking proficiency. The following data is currently collected for all students: Male, Female, Race (Black Non-Hispanic, White Non-Hispanic, Hispanic, Asian/Pacific Islander, American Indian/Alaskan Native and Other), IDEA/IEP, LEP, Gifted, and Migrant. Statewide scores are currently divided into Accountable (which includes all students which took the test) and Reportable (which excludes

IDEA students, absentees from all three sessions, and those with tests marked Invalid by the tester). Vocational students will be compared to the Accountable students taking the test.

Initial MAP data will be available only for vocational education program completers. Since the MAP is given to students prior to the completion of their junior year in high school, the number of concentrators will be minimal. Upon graduation from high school, the eligible recipients will determine the number of vocational education credits taken by students. Those students taking less than three credits will be determined to be completers. Students taking three or more credits will be determined to be concentrators. A comparison of MAP scores of these vocational students and all students taking the MAP test will be done to determine any differential. Based on two years of available data, a baseline will be established for both completers and concentrators. A level for high achievement will be established and eligible recipients will be required to meet either the high achievement level or demonstrate an increase in performance of three percent (3%) each year until high achievement is attained.

Local Accountability: Eligible recipients will be held accountable for student performance. MAP results for each eligible recipient will be compared to the state level of performance. Those eligible recipients not meeting the state level of performance will be required to submit, in their annual report, local strategies for improving performance. These strategies must be incorporated in the eligible recipient's Comprehensive School Improvement Plan. For area vocational schools that enroll students from several sending schools, it will be necessary for the area school staff to work through their administrative council, consisting of superintendents, principals or counselors, in detailing the academic skills needed for participation in vocational-technical education programs. The area vocational school is being held to the same standard that all public high schools in Missouri must meet under the Missouri School Improvement Program. Therefore, each school should be striving to achieve the same levels of performance.

## (2) Secondary Vocational-Technical Skill Proficiencies:

The Department of Elementary and Secondary Education has identified the number of essential occupational skills (competencies) for each vocational education program and course offered in the state. The Instructional Materials Laboratory at the University of Missouri; statewide advisory committees composed of educators, business and industry practitioners; and the professional staff of the Department were involved in the determination of the nature and number of essential skills. Missouri's vocational students demonstrate mastery of essential skills and occupational competencies through a structured assessment process defined through a written,

competency-based curriculum. The assessment methods for determining student mastery include student portfolios, student presentations and projects, scenarios, objective tests, and performance-based teacher assessments.

Student competency attainment is assessed and documented by three major tasks:

- Assessing student performance
- Recording student performance on the competency profile sheet
- Providing a summary of student performance (management systems)

The students are assessed in authentic, real-world situations consistent with their business/industry criteria using both product and process assessment philosophies. Each student has an individual competency profile sheet that documents if, to what extent, and when a competency was attained. A sample competency profile sheet is included with this response. Competency attainment is documented on the competency profile sheet using the following 1-6 rating scale:

- |   |   |
|---|---|
| 0 | No Exposure: no experience/knowledge in this area   |
| 1 | Unsuccessful Attempt: unable to meet knowledge or performance criteria and/or required significant assistance |
| 2 | Partial Demonstration: met some of the knowledge or performance criteria with or without minor assistance     |
| 3 | Knowledge Demonstrated: met knowledge criteria without assistance at least once                               |
| 4 | Performance Demonstrated: met performance criteria without assistance at least once                           |
| 5 | Repetitive Demonstration: met performance and/or knowledge criteria without assistance on multiple occasions  |
| 6 | Mastered: successfully applied knowledge or skills in this area to solve related problems independently       |

The competency profile sheet philosophy can best be described as “work in progress” for the student, with individual ratings having the potential of being revised to meet currently demonstrated skill attainment levels. For example, a student on a given date may have received a “4” rating, which indicates “Performance Demonstrated: met performance criteria without assistance at least once.” However, through the course of continued instruction and repetition, that same student may be able to achieve a higher rating. In this example, the student who achieved a “4” rating may have the opportunity to achieve a “5” (Repetitive Demonstration) or a “6” (Mastered).

At any time during the instruction and assessment of a given course, the competency ratings can be transferred to a competency management system,

which may be either a paper- or electronic- based system. The end report, which signifies the end of all instruction and assessment of the given course, summarizes the instruction, assessment, and competency attainment of the student.

At the end of each fiscal year, the eligible recipients will provide a written report to the Department of Elementary and Secondary Education which indicates, for all vocational programs operated by the eligible recipient, the number of essential occupational skills mastered by the total number of vocational education students enrolled. This data will be disaggregated by male, female, ethnicity and special populations as defined in Section 1(b)(23) of the Act.

The Department of Elementary and Secondary Education will compile each year the Essential Occupational Skills Attainment Report. This report is an aggregate for each vocational school, comprehensive high school, technical college or community college. These reports are further aggregated at the state level and are used as part of the State's evaluation of vocational-technical education. The statewide results regarding occupational skill attainment indicated that in Fiscal Year 1998, eighty-five and eight-tenths percent (85.8%) (85.0% at the secondary level and 94% at the postsecondary level) of the completing vocational education students met the standard of eighty percent (80%) occupational skill attainment.

Local Accountability: Eligible recipients will be held accountable for student performance. Those eligible recipients not meeting the state level of performance will be required to submit, in their annual report, local strategies for improving performance. These strategies must be incorporated in the eligible recipient's Comprehensive School Improvement Plan.

### (3) Postsecondary Academic Proficiencies:

Each eligible recipient receiving funds under the postsecondary distribution formula will be required to submit an annual report which indicates the total number of students who complete a vocational education program and received either a certificate or a postsecondary degree. The institution will also be required to report, in the aggregate, the number and percent of students who scored at or above the state established level of performance on a nationally certified and state approved academic attainment instrument such as the College Assessment of Academic Proficiency (CAAP) from ACT, Inc.

Local Accountability: Each postsecondary institution not meeting the state established level of performance will be required to submit a local strategy for improvement of academic proficiency for students enrolled in vocational-technical education. The local plan for improvement must include specific



actions the postsecondary institution will take in order to improve performance.

(4) Postsecondary Vocational-Technical Skill Proficiencies:

The Department of Elementary and Secondary Education has identified the number of essential occupational skills (competencies) for each vocational education program and course. The University of Missouri's Instructional Materials Laboratory and state-wide advisory committees composed of educators, business and industry practitioners and the professional staff of the Department were involved in the determination of the number of essential skills.

Missouri's vocational students demonstrate mastery of essential skills and occupational competencies through a structured assessment process defined through a written, competency-based curriculum. The assessment methods for determining student mastery include student portfolios, student presentations and projects, scenarios, objective tests, and performance-based teacher assessments.

Student competency attainment is assessed and documented by three major tasks:

- Assessing student performance
- Recording student performance on the competency profile sheet
- Providing a summary of student performance (management systems)

The students are assessed in authentic, real-world situations consistent with their business/industry criteria using both product and process assessment philosophies. Each student has an individual competency profile sheet that documents if, to what extent, and when a competency was attained. A sample competency profile sheet is included with this response. Competency attainment is documented on the competency profile sheet using the following 1-6 rating scale:

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| 3 | Knowledge Demonstrated: met knowledge criteria without assistance at least once                               |
| 4 | Performance Demonstrated: met performance criteria without assistance at least once                           |

- 5 Repetitive Demonstration: met performance and/or knowledge criteria without assistance on multiple occasions
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The competency profile sheet philosophy can best be described as “work in progress” for the student, with individual ratings having the potential of being revised to meet currently demonstrated skill attainment levels. For example, a student on a given date may have received a “4” rating, which indicates “Performance Demonstrated: met performance criteria without assistance at least once.” However, though the course of continued instruction and repetition, that same student may be able to achieve a higher rating. In this example, the student who achieved a “4” rating may have the opportunity to achieve a “5” (Repetitive Demonstration) or a “6” (Mastered).

At any time during the instruction and assessment of a given course, the competency ratings can be transferred to a competency management system, which may be either a paper- or electronic- based system. The end report, which signifies the end of all instruction and assessment of the given course, summarizes the instruction, assessment, and competency attainment of the student.

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The Department of Elementary and Secondary Education will compile each year the Essential Occupational Skills Attainment Report. This report is an aggregate for each vocational school, comprehensive high school, technical college or community college. These reports are further aggregated at the state level and are used as part of the State’s evaluation of vocational-technical education. The statewide results regarding occupational skill attainment indicated that in Fiscal Year 1998, eighty-five and eight-tenths percent (85.8%) (85.0% at the secondary level and 94% at the postsecondary level) of the completing vocational education students met the standard of eighty percent (80%) occupational skill attainment.

Local Accountability: Eligible recipients will be held accountable for student performance. Those eligible recipients not meeting the State level of performance will be required to submit, in their annual report, local strategies for improving performance.

- b. Core Indicator Number 2: Student attainment of high school diploma, equivalent, or postsecondary degree or credential.

(1) Secondary student attainment of high school diploma or GED:

Local Accountability: Eligible recipients will be required to meet state established performance measures. Eligible recipients that do not meet or exceed the statewide established performance measures will be required to submit in their annual report the strategies to be used by the district to meet the state established standard. These strategies must be included in the district's Comprehensive School Improvement Plan. For area vocational schools that enroll students from several sending schools, it will be necessary for the area school staff to work through their administrative council, consisting of superintendents, principals or counselors, on dropout prevention programs. The area vocational school is being held to the same standard that all public high schools in Missouri must meet under the Missouri School Improvement Program. Therefore, each school should be striving to achieve the same levels of performance.

(2) Postsecondary attainment of a degree or credential:

Local Accountability: Eligible recipients will be held accountable for the number of students attaining a high school diploma, a postsecondary certificate or degree. Eligible recipients will provide the required data through existing reporting systems or new reporting requirements as a portion of an annual performance report. Eligible recipients not meeting the state established performance measures will be required to submit a local improvement plan which includes strategies for increasing the rates for attaining a certificate or degree.

- c. Core Indicator Number 3: Placement in, retention in and completion of postsecondary education or advanced training, the military or employment.

(1) Secondary placement, retention and completion:

Local Accountability: Eligible recipients are held accountable to statewide established performance measures through analysis of statewide collected data. Eligible recipients not meeting state established standards would be required to submit an improvement plan as a part of their annual report. These strategies must also be included in the recipient's Comprehensive School Improvement Plan.

(2) Postsecondary Education Placement, Retention and Completion:

Local Accountability: Eligible recipients are held accountable to state established performance measures through analysis of statewide collected data. Eligible recipients not meeting state established standards will be required to submit an improvement plan as a part of their annual report. This local plan must detail how the school will make improvements in performance.

- d. Core Indicator Number 4: Participation in and completion of vocational and technical education programs leading to nontraditional employment. Core Indicator Number 4 requires participation and completion data. (Sec 113(b)(2)(A)(i-iv))

The State has developed a data collection, analysis and reporting system that:

- (1) Determined the nontraditional vocational education programs that meet the definition within Section 3(17) of the Act;
- (2) Collected enrollment of nontraditional students by gender and program area;
- (3) Collected the number of nontraditional vocational education participants;

Local Accountability: Eligible recipients will be required to report data which will allow a comparison to statewide performance measures. Those eligible recipients failing to meet the statewide levels of performance will be required to submit an annual report which outlines the strategies that will be taken to enhance performance.

3. Describe how the State will annually evaluate the effectiveness of vocational and technical programs, and describe, to the extent practicable, how the State is coordinating such programs to ensure nonduplication with other existing Federal programs. (Section 122(c)(6)).

Secondary:

The State of Missouri has relied primarily on the use of the Missouri School Improvement Program (MSIP) to evaluate the effectiveness of vocational education programs. Beginning in 1990, the State has reviewed the resources, process and performance of every public elementary and secondary school district. In an effort to ensure nonduplication of on-site evaluations and collection of data an integral part of MSIP are those standards pertaining to vocational education. The school districts must meet a set of rigorous standards that meet general education requirements as well as standards that pertain specifically to vocational education. The school

districts undergo the MSIP review on a five-year cycle and receive a level of accreditation based on the review. These levels of distinction are accredited, provisionally accredited and unaccredited. Each school district must provide a written Comprehensive School Improvement Plan that addresses the specific major areas of concern derived from the review. This strategic plan must also include long-range plans for total school improvement.

Vocational education programs are reviewed in the following areas: (1) the number of vocational programs offered to students in the district's program of studies; (2) verification that the actual vocational program enrollment and services provided are an integral part of the district's total program of studies; (3) an assurance that all curriculum for vocational education is competency based and includes an instructional management system; (4) verification that vocational education programs are annually evaluated based on a written plan for program improvement; and (5) verification that the district includes vocational student organizations as a part of their intra-curricular programming.

Secondary school districts will also be evaluated based on the performance of students. Performance will be measured based on the four Perkins III core indicators of performance and state levels of performance. The state will annually collect specific, district data for these performance measures and compare this data to the statewide levels of performance. Those districts not performing at the state-established levels of performance will be required, as a part of their annual report to the State, to indicate what measures they will take to improve performance. All reports and data submitted by secondary school districts will be in terms of students who have completed one or more vocational credits and students who have demonstrated concentration in vocational education by completing three or more vocational credits.

#### Postsecondary:

In its FV-3 form, "Guide for Submitting Applications for Expanding/New Regular Vocational Education Programs," specific steps have been taken by the Department of Elementary and Secondary Education to ensure the nonduplication of funding levels for postsecondary technical education programs approved by both the Department of Higher Education and the Department of Elementary and Secondary Education. Postsecondary institutions are encouraged to utilize the new and/or expanding program approval application process established by the Department of Higher Education. For consideration of vocational education program operation and funding support by the Department of Elementary and Secondary Education, the institution must submit a copy of that application to the Assistant Commissioner for Vocational and Adult Education in the Department of Elementary and Secondary Education. Staff between the two (2) state agencies then confer and coordinate approval/disapproval. Details of all approved vocational and technical education programs are annually provided to the other three state agencies involved in

Missouri's workforce development system -- Economic Development, Social Services, and Labor and Industrial Relations. This ensures not only nonduplication of efforts through JTPA/WIA, Wagner-Peyser, Vocational Rehabilitation programs, etc., but also encourages input from all five (5) agencies into needed and emerging vocational education programs.

In cooperation with the Department of Higher Education and the Department of Elementary and Secondary Education, the postsecondary institutions use a variety of means to evaluate the effectiveness of postsecondary vocational education programs. These include, but are not limited to the following:

- (1) Annual program reviews conducted by advisory committees composed of business and industry practitioners to evaluate student assessment results, accreditation and licensure attainment, curriculum, facilities, and professional development of staff.
- (2) Analysis of enrollment, retention, completion, and placement trends for postsecondary vocational technical education programs.
- (3) Student assessment scores on national academic achievement tests scores such as the CAAP from the ACT, Inc. (a collegiate academic achievement exam used by most higher education institutions in Missouri)
- (4) Mastery rate of students on identified essential skills/occupational competencies.
- (5) Program and facility reviews by national accrediting agencies such as North Central Association, Child Development Associates, etc.
- (6) Student and employer satisfaction surveys and results from "Counseling for High Skills," a new customer input instrument from ACT, Inc.

The annual assessment of postsecondary vocational education programs conducted by the Department staff will include reviews of the above information as well as the attainment of performance levels on the four (4) core indicators of Perkins III by each institution.

4. Describe how the State will report data relating to students participating in vocational and technical education in order to adequately measure the progress of students, including special populations. (Section 122 (c)(12)).

Under Perkins III, the Missouri Department of Elementary and Secondary Education, Division of Vocational and Adult Education will be responsible for reporting all data relevant to the progress of students participating in vocational education to the U.S. Department of Education. Special populations will be reported in the same manner as other data. With the changes in the definition of special populations in Perkins II,

new methods of collecting and reporting data will be devised in order to accurately report the progress of these groups. These methods will build upon the current data collected on special populations as defined in Perkins II.

Data will be collected from local program providers through existing data reporting systems such as Core Data, Vocational Education Data System (VEDS), CTB McGraw Hill (MAP data) and through school reports submitted through specific reporting instruments or as a part of the eligible annual report. This school data will then be aggregated to form a statewide report based on the performance measures previously established and will be included in the Perkins III Annual Performance Report. Each report will indicate a baseline of data that is or will be established for each performance measure and progress will be measured in comparison to this baseline. Special populations will be reported in the same manner as other data. Special populations data will be collected and reported for each of the indicators of performance. Much of the special populations data is not currently collected through existing reporting systems. New methods of collecting and reporting data will be devised in order to accurately report the progress of these groups. Much of the data generated from the performance measures will be included in presentations to the State Board of Education, legislative committees, community organizations, the Missouri Training and Employment Council (MTEC), and other interested citizens.

Under Perkins II, Missouri established a performance standard indicating that the proportion of participation of individuals who are members of special populations groups in preparatory vocational education programs/courses would be equal to or greater than the proportion of their membership in the relevant district/institution population.

To measure achievement of this standard, each eligible recipient institution provided a special populations report to the Department, as a part of the local application process. These reports provide data regarding the number of “special population” individuals in the general population as well as individuals enrolled in vocational education,

As noted in the 1998 *Missouri Vocational Education Annual Performance Report*, the statewide participation rates of students with disabilities and those who are academically and economically disadvantaged are four and four tenths percent (4.4%) disabled and sixteen and two-tenths percent (16.2%) disadvantaged students enrolled in vocational education as compared to ten and one-tenth percent (10.1%) disabled and twenty-two and six-tenths percent (22.6%) disadvantaged individuals in the relevant population.

#### DISABLED - SECONDARY LEVEL

During Fiscal Year 1998, 224 local education agencies were involved in providing supportive services to 6,041 secondary students with disabilities, who were mainstreamed into vocational education programs through the State.

#### DISABLED - POSTSECONDARY/ADULT LEVEL

During Fiscal Year 1998, 53 local education agencies were involved in providing supportive services to 1,674 postsecondary/adult students with disabilities who were mainstreamed into vocational education programs throughout the State

#### LIMITED ENGLISH PROFICIENT (LEP) - SECONDARY LEVEL

During Fiscal Year 1998, 27 secondary Limited English Proficient (LEP) students were provided interpreters and bilingual tutors utilizing federal Perkins funds.

#### LIMITED ENGLISH PROFICIENT (LEP) - POSTSECONDARY/ADULT LEVEL

Special services for 347 postsecondary/adult Limited English Proficient (LEP) students were provided by area vocational schools and community colleges.

#### DISADVANTAGED (EXCLUDING LEP) - SECONDARY LEVEL

During Fiscal Year 1998, 281 local education agencies provided supportive services for 18,494 secondary disadvantaged students through the State in mainstreamed vocational education programs.

#### DISADVANTAGED (EXCLUDING LEP) - POSTSECONDARY/ADULT LEVEL

During Fiscal Year 1998, 63 local education agencies provided supportive services for 20,622 postsecondary/adult disadvantaged students in mainstreamed vocational education programs through the State.

#### SINGLE PARENT/DISPLACED HOMEMAKER (Program Enrollees)

During Fiscal Year 1998, a total of 40 secondary students, 731 adult students, and 1,535 postsecondary students (2,306 grand total) were enrolled in single parent, displaced homemaker programs.

#### SINGLE PARENT/DISPLACED HOMEMAKER (Services Only)

During Fiscal Year 1998, a total of 292 secondary students, 1,362 adult students, and 2,055 postsecondary students (3,709 grand total) received services through single parent, displaced homemaker programs.



#### GENDER BIAS (Program Enrollees)

During Fiscal Year 1998, a total of 478 secondary students, 347 adult students, and 553 postsecondary students (1,378 grand total) were enrolled in gender bias programs.

#### GENDER BIAS (Services Only)

During Fiscal Year 1998, a total of 670 secondary students, 1,724 adult students, and 690 postsecondary students (3,084 grand total) received services through gender bias programs.

5. Describe how the State will ensure data reported from local education agencies and eligible institutions under Perkins III and the data reported to the Secretary are complete, accurate and reliable. (Section 122( c ) (20)).

The application for local eligible recipients for Perkins III funds requires the school districts, area vocational schools, community colleges, and technical schools to describe the methodology to be used for data collection and reporting for each of the four (4) Perkins Core Indicators. Upon receipt of the local applications by July 1, staff from the Division of Vocational and Adult Education in the Department of Elementary and Secondary Education will provide technical assistance to include data collection guidelines (to be developed) for each of the Core Indicators, telephone and on-line assistance, and on-site reviews to determine the accuracy, validity, and reliability of the data collection and reporting systems.

Data will be reported to the Department through various reporting channels to include the common core data collection for public secondary and area vocational schools, Department of Higher Education data collection systems, the Missouri Vocational Education Data System (VEDS) for secondary and postsecondary vocational and technical education, Statewide Job Placement records system, and end of the year reports. With reference to the Missouri Assessment Program, student data records for all elementary and secondary school districts in Missouri is maintained by the Department and cross-reference checks will be made using local education agency reports and Department records. In addition, student assessment data is maintained through CTB McGraw Hill, the Department's testing contractor. Both CTB McGraw Hill and the Department will run various aggregate comparisons for all Missouri Assessment Program, to include students in vocational education. The use of some of these parallel systems of data collection will allow for a comparison of similar data items. Staff in the Division of Vocational and Adult Education will perform desk audits at the end of the program years to ensure accuracy of the data. The findings of discrepancies in data from the various systems will result in on-site visits to the educational institutions and the development of corrective action plans.

6. As required by Section 112(b)(8)(B) of the Workforce Investment Act of 1998, describe the common data collection and reporting processes used for the programs and activities described in Section 112(b)(8)(A)(iii) of the Workforce Investment Act of 1998, and to postsecondary vocational education activities. (Section 122(c)(21)).

The Department of Elementary and Secondary Education is currently participating in state level discussions regarding the implementation of the Workforce Investment Act of 1998. The Assistant Commissioner for Vocational and Adult Education serves on the State Workforce Investment Board. The staff of the Department of Economic Development that coordinates the Workforce Investment Act for Missouri and the staff of the Department of Elementary and Secondary Education have been holding regular meetings to ensure coordination of efforts that include collection, analysis and reporting of common data elements. All of these efforts are being coordinated with the Governor's office and the five (5) state agencies involved in workforce development are being held responsible for the four outcome measures designed to ensure state agencies cooperate in all aspects of the Carl D. Perkins Vocational and Technical Education Act of 1998 and the Workforce Investment Act of 1998. Missouri's Governor has established four (4) outcome measures for individuals receiving services from the Missouri Workforce Development System :

- get a job;
- get higher earnings;
- get out of poverty; and
- keep a job for twelve months.

Missouri will continue the use of the Evaluation of the Missouri Workforce Development System and the University of Missouri. The purpose of this evaluation is to provide relevant information to the Governor, the Missouri Training and Employment Council, and state agencies about the performance of the Missouri's workforce development systems.

Four (4) broad service categories are cited by the state agencies in the Interagency Agreement as being those that lead to successful employment outcomes. These categories are:

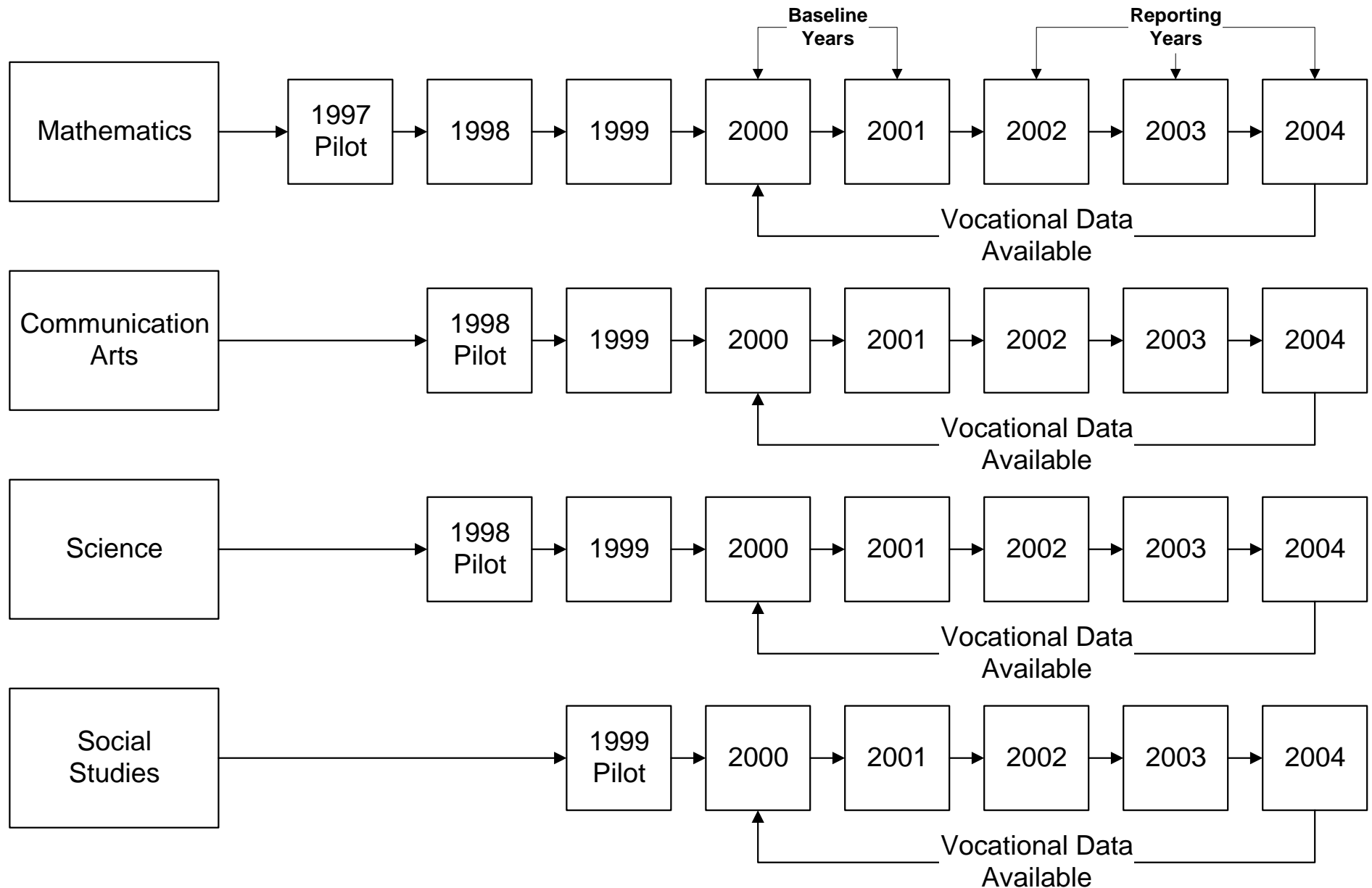
- ◆ Assessment
- ◆ Education and training
- ◆ Job readiness and job search
- ◆ Supportive services

Educational data reports from the Department of Elementary and Secondary Education and the Department of Higher Education are shared with other state workforce development agencies to ensure that they are not collecting duplicated data elements. Quarterly unemployment records are used to evaluate the four (4) measures of getting a job, getting higher earnings, getting out of poverty, and keeping

a job for twelve months. Again, the use of various data sources will allow for the comparison of similar data items. Staff from the Division of Vocational and Adult Education will provide technical assistance to postsecondary vocational education institutions to ensure the use of common data collection and reporting under the Workforce Investment Act and postsecondary vocational education activities under Perkins III.



## Missouri Assessment Program (MAP) - Implementation Chart



### III. SPECIAL POPULATIONS AND OTHER GROUPS

#### A. Descriptions

1. Describe the eligible agency's program strategies for special populations (Section 122(c)(7))

Special populations are defined by the Act as:

- a. Individuals with disabilities;
- b. Individuals from economically disadvantaged families, including foster children;
- c. Individuals preparing for nontraditional training and employment;
- d. Single parents, including single pregnant women;
- e. Displaced homemakers; and
- f. Individuals with other barriers to educational achievement, including individuals with limited English proficiency.

To assist members of special populations to enter, enroll, and complete vocational education programs as they prepare for high wage, high tech careers, the state, through a Request for Proposal (RFP) process using a combination of state and local funds, will develop a network of regional resource centers and resource personnel across the state. These personnel will work with local school districts and community colleges in the following ways:

#### Recruitment/enrollment

- a. Develop brochures, prepare media advertising, and coordinate special materials designed to appeal to members of special populations.
- b. Prepare information regarding career opportunities with emphasis on non-traditional opportunities.
- c. Distribute materials throughout the community, targeting day care facilities, medical facilities, and workforce development agencies.
- d. Meet with prospective students and assist with the initial assessment process.
- e. Provide career counseling through continued development and/or improvement of existing career guidance activities within the Missouri Comprehensive Guidance Program Model and the Guidance and Placement System for Area Vocational Schools to assist students to consider new and emerging fields in vocational and technical education and to choose appropriate training and coursework. Assistance to participants in finding an appropriate job and continuing their

education is provided. Nontraditional training and employment activities will be supported.

- f. Provide professional development for administration and staff on the needs of special populations.

Skill attainment/program completion/graduation

- a. Assist in identifying the needs and conditions of members of special populations.
- b. Coordinate and facilitate support groups and support services including child care, adaptive materials, tutors and transportation.
- c. Coordinate resources for special populations that may include clothing or special supplies.
- d. Provide inservice activities for faculty, counselors, and administrators that identify strategies for serving special populations.
- e. Assist with data collection regarding the progress of special populations students.
- f. Collaborate with other individuals serving members of special populations.
- g. Serve as a student advocate.
- h. Present workshops for students on achieving success in school.
- i. Coordinate with outside agencies, where appropriate.
- j. Assist individuals entering nontraditional training.

Advanced training/postsecondary education/job retention and high wages

- a. Conduct student workshops on job-readiness skills, resume writing, time management.
- b. Coordinate mentoring and role model programs.
- c. Facilitate the transition from secondary to postsecondary, from secondary to employment and from postsecondary to employment by assisting with applications and interviews, working with business and community agencies, coordinating with workforce development agencies.
- d. Identify and recognize, through contests and other award programs, those entering nontraditional occupations.

2. Describe how individuals who are members of special populations will be provided with equal access to activities under Perkins III. (Section 122(c)(8)(A))

Section 427 of the General Education Provisions Act (GEPA) requires each applicant for funds to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its federally-assisted program for students, teachers, and other program beneficiaries. Local recipients must outline, in their application, steps to be taken to overcome the barriers of gender, race, national origin, color, disability, or age. Individuals who are members of special populations will be provided with equal access to all vocational and technical programs that are available to individuals who are not members of special populations including occupationally specific courses of study, cooperative education, apprenticeship programs, comprehensive career guidance, and counseling services. To ensure equal access, the following strategies will be implemented at the local recipient level:

- a. Timely notification to all students of available programs and services by no later than 9<sup>th</sup> grade.
  - b. Identification and location of target populations to ensure the success of recruitment strategies.
  - c. Enrollment and participation by members of special populations in numbers that mirror their numbers in the general population.
  - d. Equal access to specific programs that may be over-enrolled.
  - e. Printed recruitment materials in other languages and alternate formats.
  - f. Entry requirements that do not adversely affect access for members of special populations.
  - g. Assistance and support for members of special populations that may include financial assistance.
  - h. Support for individuals entering nontraditional courses of study.
3. Describe how individuals who are members of special populations will not be discriminated against on the basis of their status as members of special populations. (Section 122(c)(8)(B))

Vocational and technical programs and activities will be provided in the least restrictive environment in compliance with P.L. 101-476, The Individuals with Disabilities Education Act, Title II of the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Local recipients will also assure



that they are in compliance with Title IX of the Education Amendments of 1972, Title VI of the Civil Rights Act of 1964, and the Age Discrimination Act of 1975. In addition, all institutions offering vocational-technical education will develop and disseminate nondiscrimination policies, publish the names of contact persons within the institution, disseminate grievance policies and publish the location of accessible facilities.

State level vocational education staff conduct Civil Rights on-site visits and monitor compliance with OCR policies. Technical assistance is also provided to institutions as they develop strategies to assure nondiscrimination.

4. Describe how individuals who are members of special populations will be provided with programs designed to enable the special populations to meet or exceed state-adjusted levels of performance, and how it will prepare special populations for further learning and for high skill, high wage careers (Section 122(c)(8)(C)).

Eligible recipients will ensure that strategies and services for members of special populations will lead them to meet high levels of performance and to pursue further learning or enter high wage occupations. Using a team approach to coordinate activities, specific services provided in collaboration with the network of resource personnel will include:

- a. Identifying individuals who require additional assistance in meeting performance levels.
  - b. Providing services such as tutors, note-takers, instructional aides, special materials, remedial instruction, language instruction, adaptive technology, and other support services including financial, child care, and transportation.
  - c. Developing individualized vocational education plans.
  - d. Providing career counseling and job readiness skills, coordinating placement in work-based settings, and assisting with entry into employment.
  - e. Providing mentors and role models, particularly for those entering nontraditional occupations.
5. Describe how the eligible agency will adequately address the needs of students in alternative education programs, if appropriate (Section 122(c)(13))

The State's role in the implementation of Perkins III is to ensure that students in alternative learning environments are not denied access to vocational and technical education and that they successfully progress to further education or to employment in high wage occupations. The following strategies will address these goals:

- a. Technical assistance will be provided to alternative school faculty and administration on the opportunities in vocational education.
  - b. Eligible recipients will focus a portion of their recruiting efforts on students in alternative settings.
  - c. Individualized vocational education programs will be developed for disabled students and implemented by vocational resource educators (VREs).
  - d. Basic skill instruction, individualized counseling, and flexible scheduling, when appropriate, will be provided.
  - e. Local personnel will continually monitor student progress in relation to meeting statewide performance standards, progress in completing a vocational program or course of study, and progress after enrollment in postsecondary education or entry into employment.
  - f. Information about nontraditional careers and courses of study will be provided.
6. Describe how funds will be used to promote preparation for nontraditional training and employment (Section 122(c)(17)).

All students should be encouraged to explore all career and training options, including those that are nontraditional for their gender. The Act defines nontraditional training and employment as occupations or fields of work, including careers in computer science, technology, and other emerging high skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in each occupation or field of work. Occupational segregation continues to be a significant factor contributing to the wage gap between men and women. To promote preparation for nontraditional training and employment, the state will use \$150,000 of state leadership funds to support two statewide grants that will provide technical assistance and resources to local providers. The following activities are anticipated:

- a. Conducting a statewide contest that recognizes nontraditional students at the secondary and postsecondary levels;
- b. Developing posters and brochures highlighting nontraditional careers;
- c. Offering training workshops and seminars;
- d. Developing classroom activities;
- e. Targeting middle school students to encourage young women to enter high tech occupations;

- f. Distributing a newsletter for practitioners;
- g. Coordinating an on-loan library of video and print materials;
- h. Coordinating with other workforce development agencies; and
- i. Distributing “best practices” information.

In addition, the network of resource personnel will:

- a. Promote awareness of nontraditional career opportunities for both females and males;
  - b. Recruit both females and males into nontraditional training programs;
  - c. Coordinate efforts to retain nontraditional students in programs and help them successfully complete their training; and
  - d. Prepare nontraditional students for the workplace.
7. Describe how funds will be used to serve individuals in State correctional institutions (Section 122(c)(18))

Preparing criminal offenders to re-enter society with marketable job skills and assisting incarcerated youth to prepare for further education or high wage occupations is part of the mission of vocational education. The State will develop model programs that address the needs of incarcerated adults and youth. To this end, through an RFP process, project proposals will be solicited that focus on one or more of the following:

- a. Providing career exploration and counseling.
- b. Providing job readiness skills such as interview skills, resume-writing, time management, group dynamics and personal hygiene.
- c. Focusing on preparing incarcerated women for nontraditional jobs after release.
- d. Providing remedial or basic instruction to prepare incarcerated individuals for further education.
- e. Occupational skill training for incarcerated individuals.
- f. Professional development for vocational education teachers and administrators working in correctional institutions.

## V. TECH PREP

### A. Program Requirements

1. Describe how each funded Tech-Prep program will be carried out under an articulation agreement between the participants in the consortium, as defined in section 204(a)(1) of Perkins III. (Section 204(c)(1))

For the purposes of this section of the State Plan, Tech Prep is defined as follows:

Tech Prep education in Missouri is an articulated two-year secondary and two- or more-year postsecondary education program which:

- integrates academic and vocational and technical instruction which utilizes work-based and work-site learning, where appropriate and available;
- builds student competence in mathematics, science, reading, writing, communications, economics, and workplace skills through contextual academics and integrated instruction in a coherent, nonduplicative sequential course of study;
- provides technical preparation in at least one of the Career Pathways such as Arts and Communications; Business, Management, and Technology; Health Services; Human Services; Industrial and Engineering Technology; and Natural Resources;
- leads to the completion of an associate or a baccalaureate degree, postsecondary certificate, or two- or more-year apprenticeship program in a specific career field; and
- leads to placement in related employment or to further education.

For the purposes of this section, Tech Prep students are defined as follows:

Students engaged in the Tech Prep education are formally counted as a “Tech Prep Student” when they initially enroll in the Department of Elementary and Secondary Education approved vocational course(s) portion of the program and when they make a commitment to pursuing completion of an associate or baccalaureate degree, postsecondary certificate, or two- or more-year apprenticeship program in a specific career field.

In Missouri, consortia are formed to receive Tech Prep funding. Each regional consortium is required to form articulation agreements between secondary and postsecondary vocational-technical programs and/or apprenticeship training programs. These agreements are developed cooperatively between secondary and postsecondary educators to ensure student progression through a non-duplicative

sequence of courses leading to an associate or a baccalaureate degree, postsecondary certificate, or a two- or more-year apprenticeship program in a specific career field.

The components of an articulation agreement include secondary courses, postsecondary courses and/or skill blocks within an apprenticeship program, grades and/or competencies necessary to obtain credit hours or advance standing in the postsecondary career program.

2. Describe how each funded Tech-Prep program will consist of at least 2 years of secondary school preceding graduation and 2 years or more of higher education, or an apprenticeship program of at least 2 years following secondary instruction with a common core of required proficiency. (Section 204(c)(2))

Each Tech Prep education consortium will be required to develop a five-year plan which describes how the consortium plans to meet the following performance criteria as specified by Perkins III:

- a. Establishment of an articulation agreement between participants in the consortium.
  - b. Provision of instructional programs for the two years preceding high school graduation and two years of higher education and/or an apprenticeship program of at least two years following secondary instruction, with a common core of required proficiencies in mathematics, science, reading, writing, communications, economics, and workplace skills designed to lead to an associate degree and/or completion of at least two years of an apprenticeship program.
  - c. Continuation of strong comprehensive links between secondary schools and postsecondary educational institutions and continue the development, implementation and maintenance of four-year programs (2 + 2) and the establishment of a six-year program (2 + 2 + 2) designed to provide Tech Prep education career paths leading to a two-year associate degree, a four-year baccalaureate degree or apprenticeship program that focuses on high-skilled technical occupations. Tech Prep students, where permitted and appropriate, can enroll concurrently in secondary and postsecondary classes.
3. Describe how each funded Tech-Prep program will meet academic standards developed by the state, link secondary and postsecondary institutions through nonduplicative sequences of courses, use work-based learning, educational technology and distance learning. (Section 204(c)(3)(A-D))

Each funded Tech Prep education consortium will meet academic standards developed by the State of Missouri in the following ways:

- a. Missouri vocational-technical and academic course curricula have been aligned with the Missouri Show-Me Knowledge and Performance Standards. Integration of academic knowledge and performance standards into the vocational-technical program is required. Both academic and vocational-technical course curricula are evaluated on a regular basis through the Missouri School Improvement Program. This ensures that Tech Prep students will meet high academic standards, as developed by the state of Missouri, as a part of their technical career program.
- b. The contextual academic courses are a part of the Tech Prep education consortium and they have been aligned with the Missouri Show Me Standards and the SCANS skills. This alignment was coordinated by the Missouri Institute for Workforce Education (IWE) in conjunction with local Tech Prep consortia and contextual academic instructors.
- c. The Tech Prep education components at secondary and postsecondary institutions have been linked through articulation agreements, they will be continuously evaluated by each consortium through the articulation process as curricular updates and enhancements are made.
- d. Work-based or work-site learning, where appropriate and feasible, is an integral part of Tech Prep education. This type of learning is available through work-site internships, cooperative education programs, job shadowing, and school-based businesses.
- e. Missouri intends to extend the Tech Prep model beyond the original 2 + 2 plan by encouraging the development of written articulation agreements with four-year baccalaureate programs, thus creating a 2 + 2 + 2 model. An additional change will be the requirement of representation from higher educational institutions, employers and labor organizations on the state and local steering Tech Prep committees.
- f. Tech Prep education consortiums are encouraged to collaborate with and make use of a variety of state-funded school improvement programs. Many of these programs were established in 1993 through Missouri's Outstanding Schools Act. Several technology programs provide funding to purchase state-of-the art educational technology and provides access to distance learning opportunities.

Educational technology has been integrated into secondary school Tech Prep education with the support of the contextual academic courses through the A+ Schools Program, a state-funded initiative.

The Missouri Vocational-Technical Education Enhancement Grant Program has provided funds to upgrade, enhance, and/or expand the educational technologies within secondary vocational programs.

The Missouri General Assembly has funded the formation of Regional Technical Education Councils (RTEC) for the delivery of postsecondary technical education. These councils are administered by each community college to advance and promote high-skill and high-wage occupational information at each community college. The main purpose of the RTEC initiative is to extend technical education programs for high demand occupations into all areas of the state. Postsecondary technical programs are being delivered through interactive television (I-TV) networks and the Internet. Tech Prep consortia are encouraged to collaborate with the RTECs to articulate new certificate, associate degree, baccalaureate degree and/or apprenticeship training programs.

The Tech Prep consortia may utilize distance learning to provide inservice training for teachers and counselors. Tech Prep consortia will be encouraged to provide training in teaching contextually utilizing the interactive networks which have been established.

Each public secondary and postsecondary educational institution in Missouri can be connected to the Internet through the MoreNET project. This project has provided the infrastructure for a statewide educational technology network through which delivery of educational materials and instruction is possible. MoreNET is funded by the Missouri General Assembly. The MoreNET infrastructure will assist and support the delivery of Tech Prep education programs.

4. Describe how each funded Tech-Prep program includes in-service training for teachers that addresses the concerns of Perkins III. (Section 204(c)(4)(A-E))

Goals and activities have been developed and approved by the Missouri Tech Prep coordinators which address possible activities for professional development. Tech Prep education activities include professional development for teachers that:

- a. are designed to assist vocational and technical teachers to effectively implement Tech Prep education;
- b. provide for joint training for teachers in the Tech Prep consortium;
- c. are designed to ensure that teachers and administrators stay current with the needs, expectations and methods of business and all aspects of industry through the "Educators in Business and Industry" externship program;
- d. focus on training secondary and postsecondary education faculty in the use of contextual academic curricula and instruction; and
- e. provide training in the use and application of technology.

5. Describe how each funded Tech-Prep program includes training programs for counselors that addresses the concerns of Perkins III. (Section 204(c)(5)(A-E))

Tech Prep education consortiums provide regional and statewide inservice training for counselors using the *Missouri Comprehensive Guidance: A Model for Program Development, Implementation, and Evaluation*. Activities to implement inservice training for counselors are identified in activity sheets and are designed to enable counselors to more effectively:

- a. provide information to students regarding career pathways and Tech Prep education;
- b. support student progress in completing Tech Prep education;
- c. provide information on related employment opportunities;
- d. ensure that students are placed in appropriate employment; and
- e. stay current with the needs, expectations, and methods of business and all aspects of industry.

Counselors are encouraged through the Tech Prep consortiums to participate in externship programs, such as “Educators in Business and Industry.”

6. Describe how each funded Tech-Prep program provides equal access to individuals who are members of special populations. (Section 204(c)(6))

Tech Prep education provides equal access to the full-range of Tech Prep services and activities to students who are members of special populations. Tech Prep education services will be developed according to the needs of individuals so that all students have an opportunity to enter Tech Prep education that is equal to the opportunity afforded to the general population. The State of Missouri has adopted the following procedures with regard to members of special populations applying for admission to Tech Prep education.

- a. Needs of special populations will be assessed to identify services needed for individual success. Counselors and/or teachers of the local education agency will initiate the assessment process.
- b. Each student with a disability entering Tech Prep education will have an Individual Education Program (IEP) in accordance with Individuals with Disabilities Education Act (IDEA). All other special population students in Tech Prep education will have an Individual Vocational Education Program (IVEP). Assessment information will be included during an IEP and IVEP meetings with vocational personnel in attendance, when appropriate.



- c. Barriers to access/success will be identified and strategies to overcome the barriers will be developed and adopted through the IEP and/or IVEP.
  - d. Support services will be outlined by the IEP and/or IVEP teams.
  - e. The progress of special population students and students with disabilities will be evaluated on an ongoing basis with a formal written evaluation of progress at the completion of each semester. The process will be coordinated and monitored by a vocational resource educator (VRE).
7. Describe how each funded Tech-Prep program provides for preparatory services that assist participants in Tech-Prep programs. (Section 204(c)(7))

Tech Prep education will provide preparatory services which include: career pathway information, career awareness and career exploration, job shadowing and mentoring, professional development activities for staff, job outlook statistics, and specific information concerning secondary and postsecondary educational programs for students, including in-school and out-of-school activities. Additional opportunities could include: experiential education, cooperative education, apprenticeships, and job placement services. The parents of these students will be kept informed and involved wherever possible on all preparatory services.

An intense pre-employment curriculum is a part of all Tech Prep programs within the consortium. While each consortium differs in activities, students design and produce resumes, participate in simulated interviews, and attend regional job and career fairs. Counseling and placement services are provided for Tech Prep students who either wish to seek continuing educational opportunities and/or employment.

## B. Administrative Requirements

1. Describe the competitive basis or formula used to award grants to Tech-Prep consortia. (Section 204(a)(1))

A Request for Proposal (RFP) system will be used to fund the Tech Prep education consortia projects in Missouri. The statewide Tech Prep coordinators have developed and adopted five-year planning goals during strategic planning sessions. These goals and related activities form the basis for the RFP. The competitive grants process will give priority to those public education agencies that conduct Department-approved vocational education programs and have completed a previously approved Tech Prep education planning and implementation grant. Each project must meet the following qualifications:

- a. establishment of a consortium with representation from one or more secondary and one or more postsecondary institutions (including four-year institutions)

offering baccalaureate degree where appropriate and feasible) or apprenticeship training programs within a service area and assurance that participation by all public secondary schools has been actively encouraged;

- b. submission of a five-year plan that describes how the consortium will function and establishes goals, objectives, and activities and a timeline for the development of Tech Prep educational services in the various technical education career fields; and
- c. designation of one of the participating institutions as the fiscal agent for the consortium and of an individual responsible for the coordination and administration of the Tech Prep education grant/contract.

The following information must be submitted as a part of the project proposal:

- a. an abstract or summary of the planning and demonstration grants previously funded which addresses satisfactory progress toward the accomplishment of goals and activities identified in the project;
- b. an abstract which briefly describes the Tech Prep project and the rationale for the continuance of the project;
- c. a detailed plan and budget describing the goals, objectives and activities proposed to continue the Tech Prep consortium; and
- d. assurances that the project will be operated in compliance with Perkins III, in accordance with appropriate state and federal regulations.

Grant proposals will be reviewed with an evaluation guide to determine if the special considerations, objectives and timelines outlined in the application will allow consortia to meet the required Tech Prep elements. Additionally, each application will be negotiated and revised as needed to ensure the elements are addressed.

2. Describe how special consideration will be given to applications that address the areas identified in Section 205(d). (Section (d)(1-5))

The Department will give special consideration to proposals that address the identified areas which:

- a. provide for effective employment placement activities in high-demand/high-wage technical employment areas by cooperating with guidance counselors, Missouri Occupational Information Coordinating Committee (MOICC), and the Statewide Job Placement program. The transfer of students not seeking employment, but who are requesting more training and/or degrees, is provided through the development of 2 + 2 + 2 programs;

- b. provide applications that are developed with members of the Tech Prep advisory committee which represents the local consortiums. Membership in these advisory committees will include representatives from business, industry, higher education (two- and four-year institutions), labor organizations and secondary schools;
  - c. address effectively the issues of school dropout prevention and re-entry and the needs of special populations through development of specific activities to address these issues. These activities will include the assessment of needs, development of a local plan(s), and strategies for improvement of each;
  - d. provide education and training in areas or skills in which there are significant workforce shortages, including the information technology industry. The Missouri Vocational-Technical Education Enhancement Grant Program will provide funding for resources that promote the enhancement and the development of high-demand training programs and support the implementation of contextual academic courses in mathematics, science, and communications: and
  - e. describe how Tech Prep programs will help students meet high academic standards and employability competencies by utilizing the contextual academic courses and vocational competencies which have been aligned with the Missouri Show-Me Knowledge and Performance Standards and the SCANS skills.
3. Describe how an equitable distribution of assistance between urban and rural consortium participants will be ensured. (Section 205(e))

In order to ensure equitable distribution between urban and rural populations, the State Board of Education will solicit program participation from all geographic areas of the State of Missouri and will consider location and demographics as a part of the proposal selection criteria. In addition to demographics, each proposal will be evaluated based on the criteria listed in the RFP using the evaluation guide.

4. Describe how Tech-Prep programs will be evaluated using the system of core indicators and levels of adjusted performance. (Section 114(c)(3)(B)(1)(v)(I)). See section II - Accountability.

All Tech Prep program students will be evaluated using the Perkins III core indicators and the performance measures and levels of performance including student attainment of challenging state-established academic, vocational and technical skill proficiencies. Tech Prep students (secondary and postsecondary) will follow the same specific criteria as described for vocational students in the Accountability and Evaluation section of the State Plan for Vocational Education. (Refer to Section III. A. 2. Accountability and Evaluation)

5. Describe how data will be collected to address the reporting requirements in Perkins III (to be addressed in performance reporting). (Section 206)

Tech Prep education at the secondary and postsecondary levels will follow the same specific criteria as described for data collection for vocational students in the Accountability and Evaluation section of the State Plan for Vocational Education. (Refer to Section III. A. 2. Accountability and Evaluation). In addition to the core indicators described in the Accountability and Evaluation section, the following data will be provided by Tech Prep Consortia through mid-year and annual reporting to determine the effectiveness of Tech Prep education:

- Student enrollment by Tech Prep Education area;
- Exemplary Tech Prep Education services and/or activities;
- Tech Prep supportive programs, services, and activities;
- Tech Prep consortium membership;
- Tech Prep articulation agreements; and
- Progress toward attaining the five-year Tech Prep planning goals and objectives.

In addition to the four core Perkins III indicators (Refer to Section III. A. 2. Accountability and Evaluation) the following student achievement data must be reported for Tech Prep students:

- a. Reporting the percentage of Tech Prep students who need remediation at the postsecondary level.
- b. Tech Prep student placement in, retention in, and completion of postsecondary education or advance training, placement in military service, or placement or retention in employment.

#### C. Procedural Suggestions

To enhance the description of Missouri's Tech Prep Program, the eligible recipient addresses the following:

1. Provide a copy of the local application form(s) used to award Tech Prep funds to consortia, and a copy of the technical review criteria used to select winning consortia, if funds are awarded competitively.

A copy of the "Request for Proposal (RFP) for Tech Prep Education Expansion and Refinement" for the State of Missouri is included in Appendix B of the State Plan for

Vocational Education. A copy of the “Tech Prep Request for Proposal Evaluation Guide” is included in Appendix D of the State Plan for Vocational Education.

2. Provide a list of the consortia that the State expects to fund and the estimated or projected level of funding for each consortium.

A copy of the “Missouri Tech Prep Consortia and Coordinators” is included in Appendix C of the State Plan for Vocational Education.

3. Describe any changes intended to be made to the existing Tech Prep program in order to respond to changes in Perkins III, e.g. using work-based and work-site learning, extending the model beyond the original 2+2 model, incorporating institutions of higher education that award baccalaureate degree programs, and/or employer or labor organizations.

Many of the changes that are suggested for Missouri Tech Prep education are discussed in the Tech Prep Program Requirements section of the State Plan to include Sections A., 1., 2., 3., 4., 5., 6., and 7. Highlights of these changes include:

- a. A revised definition of Tech Prep Education to include articulated two-year secondary and two- or more-year postsecondary education programs that integrate academic and vocational and technical instruction which utilizes work-based and work-site learning, where appropriate and available.
  - b. The continuation of strong comprehensive links between secondary schools and postsecondary educational institutions to include the maintenance of four-year programs (2+2) and the establishment of a six-year program (2 + 2 + 2) designed to provide Tech Prep education career paths leading to a two-year associate degree, a four-year baccalaureate degree or apprenticeship programs that focus on high-skilled technical occupations.
  - c. The establishment of the St. Louis Apprenticeship Tech Prep Consortium and the continuation of the Kansas City Area Construction Apprenticeship Tech Prep Consortium, both of which involve employer and labor organizations.
4. Describe the level and degree of participation of institutions awarding baccalaureate degree, and employer or labor organizations in funded consortia.
    - a. An example of the participation of institutions awarding baccalaureate degrees in Tech Prep education is the inclusion of Southeast Missouri State University in the Southeast Missouri Regional Tech Prep Consortium and the Bootheel Tech Prep Consortium. Articulation agreements have been developed in these consortia to establish a six-year program (2 + 2 + 2) designed to provide Tech Prep education career paths leading to either a two-year associate degree, a four-year

baccalaureate degree or an apprenticeship program that focus on high-skilled technical occupations.

- b. The Construction Apprenticeship Tech Prep Consortium in Kansas City has eleven (11) skill crafts under agreement to offer Bureau of Apprenticeship approved apprenticeship training.
5. Describe any additional authorized Tech Prep activities the State Board plans to implement with Title II funds.

All activities have been described in the Tech Prep Program Requirements section of the State Plan to include Sections A., 1., 2., 3., 4., 5., 6., and 7.

#### D. Planning Reminders

1. Supplanting requirements now apply to Title II Tech Prep programs. (See Section 311(a))

The supplanting requirements now apply to Tech Prep consortia in the State of Missouri and are reflected in the “Assurances Form” to be completed by all entities submitting Request for Proposals for Tech Prep Funding. (See Appendix B of the State Plan for Vocational Education.)

1. State expenditures for Title II Tech Prep programs are now a part of the maintenance of effort calculations required by Perkins III. (See Section 311(b))

State expenditures for Title II Tech Prep education in Missouri will now be a part of the maintenance of effort calculations required by Section 311(b) of the Carl D. Perkins Vocational and Technical Education Act of 1998.

2. State administrative costs are still limited to those costs that are “reasonable and necessary”.

The State of Missouri will only allow state administrative costs for Tech Prep education that are “reasonable and necessary”.

## VI. FINANCIAL REQUIREMENTS

### A. Assurances

1. The eligible recipient will assure compliance with the requirements of Title I and the provisions of the State Plan, including the provision of a financial audit of funds received under this title which may be included as part of an audit of other Federal or State programs. (Section 122(c)(10))

See Assurance No. 16 of the executed Assurances, Page 13 of the Missouri State Plan for Vocational Education.

2. The eligible recipient will assure that none of the funds expended under Title I will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the purchasing entity, the employees of the purchasing entity, or any affiliate of such an organization. (Section 122 (c)(11))

See Assurance No. 10 of the executed Assurances, Page 12 of the Missouri State Plan for Vocational Education.

### B. Required Descriptions

1. Describe how funds received through the allotment made under section 111 will be allocated among secondary school vocational and technical education, or postsecondary and adult vocational and technical education, or both, including the rationale for such allocation. (Section 122 (c)(4)(A))

As required by the Act per Section 112 (a)(1), eighty-five percent (85%) of the basic grant will be available under the provisions of Title I. The Department has chosen to distribute seventy percent (70%) of the eighty-five percent (85%) to secondary eligible recipients and thirty percent (30%) of the eighty-five percent (85%) to postsecondary institutions.

Historically per the annual performance reports for the past four years, the Department has allocated an approximate 70/30 percent distribution between secondary and postsecondary/adult institutions.

<u>Year</u>	<u>Distribution</u>	<u>Secondary</u>	<u>Postsecondary</u>
1998 (29.5%)	15,939,535	11,247,675 (70.5%)	4,691,860
1997 (29.5%)	15,297,458	10,788,214 (70.5%)	4,509,244

1996 (28.7%)	15,589,973	11,113,298 (71.3%)	4,476,675
1995 (28.8%)	15,052,176	10,718,983 (71.2%)	4,333,193

Federal funds for vocational education are expended for secondary and postsecondary vocational education in Missouri. Excluding the large adult student enrollment, which does not receive Perkins funding, the vocational student enrollment rates for secondary and postsecondary students indicates a 70/30 ratio over the past five (5) years.

#### Enrollment

YEAR	SECONDARY	POSTSECONDARY	TOTAL
1997-98	124,395 (72%)	49,637 (28%)	174,032 (100%)
1996-97	127,598 (70%)	54,132 (30%)	181,730 (100%)
1995-96	124,849 (70%)	55,855 (30%)	180,734 (100%)
1994-95	<u>120,874</u> (68%)	<u>57,885</u> (32%)	<u>178,759</u> (100%)
	497,716 (70%)	217,509 (30%)	715,255 (100%)

Another indicator of the need and capacity for offering secondary and postsecondary vocational education programs relates to the voluntary request for grants under the State-funded Vocational-Technical Education Enhancement Grant Program. Under this program, comprehensive high schools, area vocational schools and community colleges may request funds to start new vocational education programs or to upgrade and enhance equipment and curriculum in current vocational education programs. Grants are provided on a matching basis, with 75% state and 25% local funding for instructional equipment expenditures and 50% state and 50% local funding for other expenditures.

#### Vocational-Technical Education Enhancement Grants

YEAR	SECONDARY	POSTSECONDARY	TOTAL
1997-98	\$1,860,474 (60%)	\$1,236,960	\$3,097,434
1996-97	\$5,000,000 (81%)	\$1,182,909	\$6,182,909
1995-96	\$5,927,744 (59%)	\$4,157,753	\$10,085,497
1994-95	<u>\$6,867,941</u> (53%)	<u>\$6,059,855</u>	<u>\$12,927,796</u>
	\$19,656,159 (61%)	\$12,637,477 (39%)	\$32,293,636

Based on this information, as well as the fact that per the U. S. Department of Education, Office of Vocational and Adult Education, the nationwide average has been a 68/32 percent distribution of the allocation; the Department will continue to allocate out a 70/30 percent distribution between secondary and postsecondary/adult institutions.



2. Describe how funds received through the allotment made under section 111 will be allocated among consortia that will be formed among secondary schools and eligible institutions, and how funds will be allocated among the members of the consortia, including the rationale for such allocation. (Section 122(c)(4)(B))

The allocation of funds to both secondary and postsecondary/adult vocational technical education including the rationale as required by Section 122 (c)(4)(A), Fiscal Years 2000-2004, is noted below.

Year 1: (July 1, 1999 through June 30, 2000) Distribution of funds to Secondary School Programs:

Consortia of Secondary Schools and how funds will be allocated among members of the consortia (minimum \$15,000, unless waived per Section 131(d)(1)) is noted below.

Per Section 131(d) and 135 (b)(4) of the Act, in order for a LEA to qualify for a distribution of its allocation, it must generate a minimum allocation of \$15,000 and have vocational programs of sufficient size, scope, and quality to be effective. Per Section 131(g)(1)(C) of the Act, “sufficient size, scope, and quality” is defined as a full range of Department-approved vocational education programs, services and activities provided by an eligible recipient that would provide training opportunities in four (4) of the seven (7) vocational education program areas (Agricultural education, Business education, Industrial education, Health Occupations education, Marketing and Cooperative education, Occupational Family and Consumer Sciences education, and Vocational Family and Consumer Sciences education); and supportive services that include student assessment, guidance, placement, and remedial academic support for all students, including members of special populations, who are enrolled in vocational education provided by the eligible recipient as noted in Section 3. Definitions. (3)(B) and (3)(D) of the Act.

A LEA may join into a consortium arrangement with another LEA(s) in order to meet the required minimum \$15,000 distribution amount, collectively; however, the criterion of size, scope and quality must also be met, collectively. If a LEA does not meet the above mentioned criteria and decides not to enter into a consortium arrangement, the allocation will remain at the state level and be reallocated to those LEAs which meet these requirements. Per Section 131(g)(2) of the Act funds allocated to a consortium shall be used only for purposes and programs that are mutually beneficial to all members of the consortium and can be used only for programs authorized under Title I of the Act. Such funds may not be reallocated to individual members of the consortium for purposes or programs benefiting only one

member of the consortium.

Per Section 131 (d)(2) of the Act, the eligible State agency shall waive the minimum allocation requirement of \$15,000 in any case in which the local educational agency is: located in a rural, sparsely populated area, or is a public charter school operating secondary vocational and technical education programs; and, demonstrates that the local educational agency is unable to enter into a consortium for purposes of providing activities under this part. This waiver request must be in writing, explaining the specific circumstances of the LEA and how the utilization of federal funds will be beneficial to the vocational education programs operated by the LEA, and be approved by the Department. (See the "Minimum Secondary Distribution Waiver Provision" in Appendix E.)

Allocations for local education agencies (LEA) operating only elementary schools are reallocated to the local educational agencies operating secondary schools. If a LEA that operates only elementary education sends its students to more than one LEA that operates secondary education, each "secondary" LEA's allocation will be based upon the proportional number of students which it receives from the "elementary" LEA the previous year.

According to Section 131(a) of the Act, for fiscal years beginning July 1, 1999 through June 30, 2000 the distribution of funds to secondary school programs will be based on the following:

70% funds allocated on Title I counts \*  
20% on special education counts  
10% on student enrollments

\* Title I funds refers to Section 1124 of the Elementary and Secondary Education Act of 1965.

July 1, 1999 through June 30, 2000:

A. Seventy Percent =  $\frac{\text{Title I Funds (District)}}{\text{Title I Funds (State)}}$   
of Allocation  
(70%)

B. Twenty Percent =  $\frac{\text{\# of Students with Disabilities w/IEPs (District)}}{\text{\# of Students with Disabilities w/IEPs (State)}}$   
of Allocation  
(20%)

C. Ten Percent =  $\frac{\text{\# of Students 7-12 and Adults in Voc. Ed. (District)}}{\text{\# of Students 7-12 and Adults in Voc. Ed. (State)}}$   
of Allocation  
(10%)

## Special Request

During Federal Fiscal Year 1999 (State Fiscal Year 2000), secondary vocational education funds will be distributed based on the current funding formula utilized in Perkins II. The succeeding four years, secondary vocational education funds will be distributed based on a new formula which includes data that is currently unavailable. Because the data is unavailable to determine the funding levels for the succeeding four years and moreover local eligible recipients are currently finalizing budgets, enrolling students in vocational education programs, and issuing contracts to teachers for the next school, a request is being made by the Department of Elementary and Secondary Education to maintain the current local consortium arrangements for years one and two of Perkins III.

This request is being made in view of the fact that during the first year of Perkins III (State Fiscal Year 2000), secondary vocational education funds will be distributed based on the current Perkins II funding formula. During the succeeding four years of Perkins III, secondary vocational education funds will be distributed based on a new formula. Guidance has been received from the Office for Vocational and Adult Education regarding the new formula calculation. Simulations have been run in Missouri based on available information relative to the guidance from OVAE for the second year formula under Perkins III. It appears that there will be a number of changes in consortia arrangements due to the change in the formula for the second year. It appears that there will be fewer local education agencies (LEAs) meeting the minimum allocation requirement of \$15,000 and thus qualifying as a stand-alone program. Moreover, there may be fewer LEAs that choose to stand alone due to the new accountability data collection requirements under the Perkins III legislation. OVAE has indicated additional census data will be available at the end of year two of Perkins III. Therefore, based on the number of changes that are expected to occur in consortia arrangements for the second and third year of Perkins III, it seems duplicative in effort to process new consortia for the first two years of Perkins III. Also, given the implementation date of July 1, 1999, for the first year of Perkins III, there is not adequate time for area vocational schools and other consortia leaders to make contact with prospective consortia members and develop new consortia agreements. Allowing that process to develop during the first two years of Perkins III, provides for a meaningful way to develop effective consortia.

### Year 1: (July 1, 1999 through June 30, 2000) Distribution of funds for Postsecondary Vocational and Technical Education programs:

Per Section 132(a)(2) of the Act, the distribution of funds for postsecondary/adult vocational and technical education programs will be based on the number of Pell grant recipients and recipients of assistance from the Bureau of Indian Affairs enrolled in vocational education at postsecondary institutions during the preceding year as compared to the number of Pell grant recipients enrolled in vocational education within the state for the same fiscal year with a minimum award of \$50,000

as noted in Section 132 (c)(1) of the Act.

The allocation formula for the postsecondary distribution is as follows:

Allocation =

$$\frac{\text{\# of Pell Grant Recipients (Institution) and recipients of assistance from the Bureau of Indian Affairs}}{\text{\# of Pell Grant Recipients (State) and recipients of assistance from the Bureau of Indian Affairs}}$$

In order to be eligible to receive funds, the allocation to a postsecondary institution must be at least \$50,000 and the institution must have vocational education programs of sufficient size, scope, and quality to be effective. Per Section 3. Definitions. (3)(B) and (3)(D) of the Act, sufficient size, scope, and quality is defined as a full range of Department-approved vocational education programs, services, and activities provided by an eligible recipient that would provide training opportunities in four (4) of the seven (7) vocational education program areas (Agricultural education, Business education, Industrial education, Health Occupations education, Marketing and Cooperative education, Occupational Family and Consumer Sciences education, and Vocational Family and Consumer Sciences education); and supportive services that include student assessment, guidance, placement, and remedial academic support for all students, including members of special populations, who are enrolled in vocational education provided by the eligible recipient.

By state statute (Section 178.636, RSMo), Linn State Technical College has been designated a special mission to provide statewide “educational opportunities through highly specialized and advanced technical education and training at the certificate and associate degree level in both emerging and traditional technologies with particular emphasis on technical and vocational programs not commonly offered by community college and area vocational schools”. Due to the unique legislated mission of Linn State Technical College, the institution will be deemed as meeting the definition of sufficient, size, scope and quality as defined in Section 3. Definitions. (3)(B) and (3)(D), of the Act.

Per Section 132 of the Act, eligible institutions may enter into a consortium for the purposes of receiving funds under Title I of the Act. Such consortium must: provide services to all postsecondary institutions participating in the consortium; provide services of sufficient size, scope, and quality to be effective; and use funds only for purposes and programs that are mutually beneficial to all members of the consortium. According to Section 132(a)(3)(B) of the Act, such funds may not be reallocated to individual members of the consortium for purposes or programs benefiting only one member of the consortium. Any amount which is not allocated, due to the \$50,000 minimum, will be reallocated to those postsecondary institutions which meet the minimum allocation and sufficient size, scope, and quality requirement per Section 132(c)(2) of the Act.

Per Section 132 (a)(4) of the Act, the eligible State agency shall waive the minimum allocation requirement to provide services to all postsecondary institutions participating in the consortium in any case in which the eligible institution is located in a rural, sparsely populated area. This waiver request must be in writing, explaining the specific circumstances of the eligible institution and how the utilization of federal funds will be beneficial to the vocational education programs operated by the eligible institution, and be approved by the Department.

Years 2-5: (July 1, 2000 through June 30, 2004) Distribution of funds to Secondary school programs:

According to Section 131(b) of the Act, for fiscal years beginning July 1, 2000 through June 30, 2004 the distribution of funds to secondary school programs will be based on the following:

- 70% based # of individuals 15-19 years old who reside in the school district from families below the poverty line
- 30% based on # of individuals 15-19 years old who reside in the school district served by the LEA

Consortia of Secondary Schools and how funds will be allocated among members of the consortia (minimum \$15,000, unless waived per Section 131(d)(1) is noted below.

Per Section 131(d) and 135 (b)(4) of the Act, in order for a LEA to qualify for a distribution of its allocation, it must generate a minimum allocation of \$15,000 and have vocational programs of sufficient size, scope, and quality to be effective. Per Section 131(g)(1)(C) of the Act, sufficient size, scope, and quality is defined as a full range of Department-approved vocational education programs, services, activities provided by an eligible recipient that would provide training opportunities in four (4) of the seven (7) vocational education program areas (Agricultural education, Business education, Industrial education, Health Occupations education, Marketing and Cooperative education, Occupational Family and Consumer Sciences education, and Vocational Family and Consumer Sciences education); and supportive services that include student assessment, guidance, placement, and remedial academic support for all students, including members of special populations, who are enrolled in vocational education provided by the eligible recipient as noted in Section 3. Definitions. (3)(B) and (3)(D) of the Act.

A LEA may join into a consortium arrangement with another LEA(s) in order to meet the required minimum \$15,000 distribution amount, collectively; however, the criterion of size, scope and quality must also be met, collectively. If a LEA does not meet the above mentioned criteria and decides not to enter into a consortium arrangement, the allocation will remain at the state level and be reallocated to those LEAs which meet these requirements. Per Section 131(g)(2) of the Act, funds allocated to a consortium shall be used only for purposes and programs that are

mutually beneficial to all members of the consortium and can be used only for programs authorized under this title. Such funds may not be reallocated to individual members of the consortium for purposes or programs benefiting only one member of the consortium.

Per Section 131 (d)(2) of the Act, the eligible agency shall waive the minimum allocation requirement of \$15,000 in any case in which the local educational agency is: located in a rural, sparsely populated area, or is a public charter school operating secondary vocational and technical education programs; and demonstrates that the local educational agency is unable to enter into a consortium for purposes of providing activities under this part. This waiver request must be in writing, explaining the specific circumstances of the LEA and how the utilization of federal funds will be beneficial to the vocational education programs operated by the LEA, and be approved by the Department. (See the "Minimum Secondary Distribution Waiver Provision" in Appendix E.)

Allocations for local education agencies (LEA) operating only elementary schools are reallocated to the local educational agencies operating secondary schools. If a LEA that operates only elementary education sends its students to more than one LEA that operates secondary education, each "secondary" LEA's allocation will be based upon the proportional number of students which it receives from the "elementary" LEA the previous year.

July 1, 2000 through June 30, 2004:

Seventy Percent=
$$\frac{\text{The LEA's 15-19 year old residents for preceding FY} < \text{poverty line}}{\text{The State's 15-19 year old residents for preceding FY} < \text{poverty line}}$$
  
(70%)

Thirty Percent=
$$\frac{\text{The LEA's 15-19 year old residents for preceding FY}}{\text{The State's 15-19 year old residents for preceding FY}}$$
  
(30%)

Years 2-5: (July 1, 2000 through June 30, 2004) Distribution of funds for Postsecondary Vocational and Technical Education programs:

Per Section 132(a)(2) the postsecondary allocations will be based on the number of Pell grant recipients and recipients of assistance from the Bureau of Indian Affairs enrolled in vocational education at postsecondary institutions during the preceding year as compared to the number of Pell grant recipients enrolled in vocational education within the state for the same fiscal year with a minimum award of \$50,000 as noted in Section 132(c)(1).

The allocation formula for the postsecondary distribution is as follows:

Allocation =

$$\frac{\text{\# of Pell Grant Recipients (Institution) and recipients of assistance from the Bureau of Indian Affairs}}{\text{\# of Pell Grant Recipients (State) and recipients of assistance from the Bureau of Indian Affairs}}$$

In order to be eligible to receive funds, the allocation to a postsecondary institution must be at least \$50,000 and have vocational education programs of sufficient size, scope, and quality to be effective. Per Section 3. Definitions. (3)(B) and (3)(D) of the Act, sufficient size, scope, and quality is defined as a full range of Department-approved vocational education programs, services, and activities provided by an eligible recipient that would provide training opportunities in four (4) of the seven (7) vocational education program areas (Agricultural education, Business education, Industrial education, Health Occupations education, Marketing and Cooperative education, Occupational Family and Consumer Sciences education, and Vocational Family and Consumer Sciences education); and supportive services that include student assessment, guidance, placement, and remedial academic support for all students, including members of special populations, who are enrolled in vocational education provided by the eligible recipient.

By state statute (Section 178.636, RSMo), Linn State Technical College has been designated a specific mission in provide statewide “educational opportunities through highly specialized and advanced technical education and training at the certificate and associate degree level in both emerging and traditional technologies with particular emphasis on technical and vocational programs not commonly offered by community college and area vocational schools”. Due to the unique legislated mission of Linn State Technical College, the institution will be deemed as meeting the definition of sufficient, size, scope and quality as defined in Section 3. Definitions. (3)(B) and (3)(D) of the Act.

Per Section 132 of the Act, eligible institutions may enter into a consortium for the purposes of receiving funds under Title I of the Act. Such consortia must: provide services to all postsecondary institutions participating in the consortium; provide services of sufficient size, scope, and quality to be effective; and use funds only for purposes and programs that are mutually beneficial to all members of the consortium. According to Section 132(a)(3)(B) of the Act, such funds may not be reallocated to individual members of the consortium for purposes or programs benefiting only one member of the consortium. Any amount which is not allocated, due to the \$50,000 minimum, will be reallocated to those postsecondary institutions which meet the minimum allocation and sufficient size, scope, and quality requirement per Section 132(c)(2) of the Act.

Per Section 132 (a)(4) of the Act, the eligible State agency shall waive the minimum

allocation requirement to provide services to all postsecondary institutions participating in the consortium in any case in which the eligible institution is located in a rural, sparsely populated area. This waiver request must be in writing, explaining the specific circumstances of the eligible institution and how the utilization of federal funds will be beneficial to the vocational education programs operated by the eligible institution, and be approved by the Department.

### C. Procedural Suggestions

#### 1. Detailed Projected Budget Table

- a. The amounts to be made available for purposes under Section 112 (a)(1) of the Act.

A total of 85% of the Basic State Grant will be distributed to local secondary and postsecondary vocational education programs:

LOCAL PROGRAMS	85%	\$17,798,847
WITHIN FORMULA	76.5%	\$16,018,962
OUTSIDE FORMULA	10% of 85% (8.5%)	<u>\$ 1,779,885</u>
		\$17,798,847

Per Section 112(c) of the Act, the state will use the 10 percent funds to serve at least two of the four categories noted below:

- rural areas;
- areas with high percentages of vocational and technical education students;
- areas with high numbers of vocational and technical education students;
- areas negatively impacted by the changes in the in-state secondary school formula.

- b. The amounts to be made available for State Leadership under Section 112(a)(2) of the Act.

An amount not exceeding ten percent (10%) of the Basic State Grant may be used for state leadership activities.

STATE LEADERSHIP (10%)	\$ 2,093,982
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ACTIVITIES	\$ 1,734,584
CORRECTIONS	\$ 209,398
EQUITY	<u>\$ 150,000</u>
	\$ 2,093,982

The following activities per Section 124 of the Act, will be funded by the above noted amount:

- Assessing vocational and technical programs
  - Expansion of the use of technology
  - Professional development
  - Support for vocational and technical education programs that improve the academic, and vocational skills of students
  - Providing preparation for non-traditional training and employment. Not < \$60,000 and not > \$150,000 of state leadership funds shall be used for such activities
  - Support for partnerships between local education agencies, higher education, adult education, employers, labor, and parents to enable students to achieve the Show-Me Standards
  - Support for programs that assist special populations in entering high-skill, high-wage careers
  - Serving individuals in State correctional institutions and individuals with disabilities
  - Technical assistance
  - Support for vocational student organizations (VSO's)
  - Support for Agricultural Education; Business Education; Industrial Education; Health Occupations Education; Marketing and Cooperative Education; Occupational Family & Consumer Sciences Education; & Vocational Family and Consumer Sciences Education programs
  - Support to improve existing or develop new vocational education courses
- c. The amounts to be made available to serve individuals in State institutions, as described in Section 112(a)(2)(A) of the Act.

Included within the ten percent of the Basic State Grant, per Section 112(a)(2)(A) an amount equal to not more than 1% of the Basic State Grant taken from the reserve for state leadership activities shall be available to serve individuals in corrections institutions.

CORRECTIONS	\$ 209,398
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The following activities will be funded:

- providing career exploration and counseling;
  - providing job readiness skills such as interview skills, resume-writing, time management, group dynamics and personal hygiene;
  - focusing on preparing incarcerated women for nontraditional jobs after release;
  - providing remedial or basic instruction to prepare incarcerated individuals for further education
  - providing skill and occupational training;
  - providing professional development for teachers.
- d. The amounts to be made available for service under Section 112(a)(2)(B) of the Act.

Included within the ten percent of the Basic State Grant, not less than \$60,000 and not more than \$150,000 shall be reserved for activities that prepare individuals for nontraditional employment per Section 112(a)(2)(B) of the Act.

EQUITY \$ 150,000

The following activities will be funded:

- conducting a statewide contest that recognizes nontraditional students at the secondary and postsecondary levels;
  - developing posters and brochures highlighting nontraditional careers;
  - offering training workshops and seminars;
  - developing classroom activities;
  - targeting middle school students to encourage young women to enter high tech occupations;
  - distributing a newsletter for practitioners;
  - coordinating an on-loan library of video and print materials;
  - coordinating with other workforce development agencies;
  - distributing “best practices” information.
- e. The amounts to be made available for State Administration under Section 112(a)(3) of which an amount up to 5% or \$250,000, whichever is greater, of the Basic State Grant may be used for state administration of vocational education programs. Per Section 112(b) any federal dollars earmarked for state administration must be matched dollar-for-dollar from nonfederal sources.

STATE ADMINISTRATION \$ 1,046,991

The following activities will be funded by the above noted amount:

- cost of developing the state plan

- reviewing local plans
  - monitoring and evaluating program effectiveness
  - assuring compliance with all applicable federal laws
  - providing technical assistance
- f. The amounts to be expended for matching of Federal expenditures for State administration.

Per Section 112(b) of the Act, and any federal dollars earmarked for State Administration must be matched dollar for dollar from non-federal sources. The Department will continue to match the five percent (5%) State Administration amount dollar for dollar from State General Revenue funds.

State Administration (Section 112(a)(3)) of the Act	\$1,046,991
State General Revenue	\$1,046,991

- g. The amounts, if any, reserved to address Section 112(c)(3) consisting of a sum not greater than 10% of the 85% allotted for local programs.

OUTSIDE FORMULA (Reserved)	\$ 1,779,885
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The Department has determined that the amounts calculated outside the formula will be spent in the following two areas: areas with high percentages of vocational and technical education students and areas with high number of vocational and technical education students. The rationale for the “areas of high percentages” of vocational students selection was based on meeting the needs of various urban and rural programs. There are 525 local school districts in Missouri and the percentage calculation as opposed to numbers of students would allow for wider use of the “Reserve fund” throughout the State.

While the calculations for the formula change for Years 2 through 5 of Perkins III have not been completed, Missouri would like to have the option of using the category of “areas negatively impacted” by the formula change as designated area for Years 2 through 5. It is believed that there will be some major impacts in our metropolitan and urban school districts as a result of the formula change especially as the implementation year relates directly to the year that educational operation changes occur with the settlement of desegregation cases in St. Louis and Kansas City. Student mobility will increase as a result of reduced reliance on desegregation “busing, the establishment of charter schools, and the emphasis on neighborhood schools as opposed to magnet schools located in other school districts and other counties. It is agreed with the Office of Vocational and Adult Education that we do not have “hard, fast data” to justify the selection of the “negatively impacted” category for “Reserve funding” in Year 1 of Perkins III.

Therefore, Missouri would like to designate the “areas with high numbers of vocational and technical education students,” as the second category for “Reserve funding” grants during Fiscal Year 2000 (Year 1). By using both the categories of “large percentage” and “high numbers” rural school districts with small total school enrollments, but large percentages of students involved in vocational education as well as urban school districts with high numbers of students in vocational education could benefit from “Reserve funding” grants.

However, Missouri would still like to maintain the option of reviewing the designated categories for “Reserve funding” as it moves into Years 2 through 5 of the implementation of Perkins III.

- h. The amounts to be expended for Tech Prep activities under Title I and II.

TECH PREP		\$ 2,223,646
State Administration	5%	\$ 111,182
Local Programs	95%	\$ 2,112,464

The following activities will be funded by the State administration amount: reviewing local plans, monitoring and evaluating program effectiveness, assuring compliance with all applicable Federal laws, and providing technical assistance.

Tech Prep funds will be State administered and allocated to local consortia on a competitive basis. (Section 204(a)(1) of the Act) Consortia will now include one or more institutions of higher education that award baccalaureate degrees. (Section 204(a)(2)(A) of the Act) Consortia will now include employer and labor organizations. (Section 204(a)(2)(B) of the Act)

- i. The amounts for each of the above categories to be expended by local educational agencies and postsecondary institutions.

Local education agencies and postsecondary institutions will be providing information regarding use of funds utilizing the *Local Guide and Application for Secondary and Postsecondary Eligible Recipients*. (See Appendix A.)

## BUDGET SUMMARY

	<u>BASIC GRANT</u>		<u>\$20,939,820</u>
1,046,991	STATE ADMINISTRATION	5%	\$
	STATE LEADERSHIP	10%	\$ 2,093,982
	ACTIVITIES		\$ 1,734,584
	EQUITY	\$150,000	\$ 150,000
	CORRECTIONS	1%	\$ 209,398
	LOCAL PROGRAMS	85%	\$17,798,847
	WITHIN FORMULA	76.5%	\$16,018,962
	OUTSIDE FORMULA	10% of 85% (8.5%)	\$ 1,779,885
	<u>TECH PREP</u>		<u>\$ 2,223,646</u>
111,182	STATE ADMINISTRATION	5%	\$
	LOCAL CONSORTIUMS	95%	\$ 2,112,464